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# COLLEGE & RESEARCH Libraries

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*by John Metcalfe* ■■

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# The Scope and Operating Efficiency of Information Centers as Illustrated by the Chemical-Biological Coordination Center of the National Research Council

BY RICHARD M. DOUGHERTY

THE DESIRE to improve our information handling techniques and the quality of information services is illustrated by the growth of specialized information centers based, at least in part, on machine technology. This study of the Chemical-Biological Coordination Center, one of the first of the major mechanized science information centers, was undertaken as one step in evaluating the strengths and weaknesses of this approach, and also to suggest means by which such organizations may be made as effective as possible.

The Chemical-Biological Coordination Center of the National Research Council (hereinafter referred to as the center, or the CBCC) was established July 1, 1946. The center was an outgrowth of World War II screening programs that had generated large quantities of data on the effects of specific chemical compounds against insects and rodents. These programs were attempts to discover substitutes for compounds made unavailable by the war. The urgency for screening programs diminished with the termination of hostilities, but many individuals believed that the scientific data they generated should be made accessible to scientists in general. This led to the concept of a central clearinghouse.

*This article is based on a research project carried out in the Graduate School of Library Service, Rutgers, the State University, New Brunswick, New Jersey. The project was supported by the United States Air Force under Contract No. AF-AFOSR-62-55 monitored by the Information Services Division, Air Force Office of Scientific Research of the Office of Aerospace Research. Dr. Dougherty is now Head of the Acquisitions Department in the University of North Carolina Library.*

The CBCC's objectives were to collect, organize, and disseminate data on chemical compounds and their effects on biological systems. The center planned also to sponsor and administer a chemical screening program, like those conducted during the war and, finally, to conduct symposia and to publish reviews.

Chemical-biological correlation, the determination of broad relationships between chemical structure and biological responses, was the center's ultimate objective. This goal was stressed because funds had been solicited from several agencies on this basis, even though actual correlation studies were far from realization in 1946.

The advisory committees of the CBCC

decided that IBM tabulating equipment and punched cards would be used for storage and retrieval of data. This decision was based on two assumptions: one, the equipment would permit greater handling speed than could be achieved with any available manual system; and two, the punched cards would provide multiple access or entry to data stored on the cards. Once the system had been agreed upon, the center turned its attention to other matters—namely, the need to devise codes and notational schemes.

Devising the codes, particularly the biology code, proved more formidable than had been anticipated. The authors of the codes were scientists, but code-building was alien to their normal activities. While they were qualified to define and to organize scientific concepts and terms, building a code to be handled by punched cards was another matter.

The objective was to construct a code for classifying biological information for eventual correlation with structural and physical characteristics of chemical compounds, and to develop a notational scheme which would make possible the transfer of data onto punched cards. The duality of this objective presented serious problems.

After several false starts, a biology code was completed. It required the efforts of over sixty scientists for almost four years to develop the nucleus from which emerged the code that was finally adopted. Initial efforts were directed toward the development of a general code, but as work progressed, the apparent need to code in greater detail led some individuals to work on codes within their own fields of specialization, *i.e.*, entomology, pathology, etc. By 1948 a tentative general code was completed. The center's executive committee directed that this code be implemented by the actual coding of data. This did not, however, halt efforts to develop detailed codes for special topics.

Following a trial period, the general code was declared unsatisfactory because it did not allow for coding in sufficient detail. This caused the center again to focus its attention on detailed codes.

One year later the center invited a former staff member, who had previously been instrumental in developing a detailed code for entomological data, to return to the center to work in cooperation with the center's staff to develop a new code. Using the general code and the various detailed codes, this effort produced the foundation of an integrated biology code.

Returning again to 1946, the most frustrating problem for the code builders was that of devising a code pattern that could be used for relating chemical structure with biological activities on a single punched card. No satisfactory pattern emerged, mainly because of restrictions imposed by the punched card.

By 1948 three coding patterns were under consideration: Codes A, B, and C. Code A required the use of secondary cards, that is, if a requester required more biological data than could be provided by the primary cards (those used in conjunction with the 1948 general code), the secondary cards, which were keyed to the primary cards, could be consulted. Codes B and C took into consideration the fact that as the files expanded the practicality of sequential sorts would diminish. As an alternative they proposed that the punched cards be prefilled by subject categories and duplicate cards be produced for the multiple files. Codes B and C differed in that the former proposed to retain the chemistry and biological data on the same card, while Code C proposed to store the data on separate cards and key them together with a reference number.

To check the merits of each pattern, each coding pattern was used to code chemical and entomological data relating to 278 compounds. The efficacy of each pattern was then tested by a series of questions. The tests proved inconclusive,



but they did show that Code A, using the secondary cards, was impractical because of the excessive machine time required in the retrieval process, and because of the need for double punching in the input process. As for patterns B and C, neither was shown to be clearly superior to the other. Code C allowed for greater file expansion and for coding in detail, but Code B permitted both types of data to be stored on the same card. Pattern B was adopted.

Two years later this decision was reversed. As the revised biology code (1950-51 version) took shape, it became apparent that there would not be sufficient storage capacity for both types of data on the same card. Consequently, Code C, which had been rejected previously, was in principle now adopted. The decision at this late date, however, was expensive because data already coded and punched had to be reprocessed.

In addition to the biology code, the center also worked on a chemistry code between 1945 and 1950. This code was designed so that organic and inorganic compounds could be described by listing their constituent groupings, both functional and nonfunctional, by linear symbols. And like the biology code, it permitted the transfer of code symbols to punched cards. Although the codification of chemical structures did not prove as difficult as codification of biological systems, the chemistry code was not without its limitations. For example, the code could distinguish between structural groupings but could not designate points of attachment. Thus, after mechanical sorts, the retrieved cards had to be manually inspected by a chemist to determine whether the selected groupings actually formed the desired compound.

The chemistry code was completed and was published by the National Research Council in 1950.

While the code-building projects received priority, the center also formulated policies concerning the selection and col-

lection of data, and developed internal procedures for handling data. Data for coding were selected on the basis of potential importance to scientists, adaptability to the CBCC files, and future usefulness to the center in making correlation studies. Originally the center aimed at collecting data on "lesser-known" compounds rather than those more frequently cited, such as DDT and Chlordane. This policy was later reversed, however, in favor of the selection criterion of uniqueness, *i.e.*, reactions of compounds unique to the center's files.

The primary sources of data for storage were from the center's screening program, unpublished reports, and selected scientific periodicals and other published materials. Coverage was intended to be broad. It included such disciplines as pharmacology, entomology, biochemistry, and medicine, among others. The number of journals containing 90 per cent of the data pertinent to the center's objectives was estimated to be two hundred and fifty. The number of journals actually processed ranged from thirty-five to fifty-five.

At first the center employed nonresident scientists to scan and abstract articles from assigned journals. The abstracts were later coded at the center by resident staff members. But because of coding errors detected during code trials conducted in 1951, the input procedure was revised. The new procedure delegated both coding and abstracting of biological data to nonresident personnel. Coding of compounds was done by the chemistry group at the center. The most drastic departure in the revised input procedure was the introduction of a double inspection. Coded data were checked and rechecked by scientific personnel.

Code sheets for recording chemical and biological data were devised. Biological data were recorded two ways: in coded form, and in abstracted form. Code symbols were also punched on standard IBM cards. The cards were then duplicated

and placed in files according to a system of predesignated subject categories. Mechanical equipment available to the center in 1947 included two types of one-column sorter, a collator, an interpreter, a tabulator, and a reproducing punch. The center later gained limited access to an IBM 101 statistical sorter.

To summarize, 1946 through 1951 could be characterized as the period of development and preparation. The codes were devised, procedures established, and policies set forth, but during this period the center had not demonstrated the practicality of its techniques, nor had it really tried. Activities emphasized the research aspects of the center's functions. At this time, however, the center assumed the role of a service agency.

An *ad hoc* committee appointed in 1950 to evaluate the center and its operations reported that the organizational phase was over, and recommended that the center should begin to demonstrate its value. This view was in essence supported by a second committee appointed in 1952. This second committee recommended specifically that the center focus its attention on providing information services. The group was not unanimously in favor of continuing the center. Some members believed that it had not shown its worth, and that operations were proving more costly than had been anticipated. But the consensus of the group after deliberation was to recommend a one-year trial period, a period which was to last three years before a successor committee was convened.

From its beginning, the center had not been able to stabilize financial support. Most of its funds were received from five agencies, four government agencies and one nonprofit foundation. The need to broaden the base of support prompted the center to approach other agencies, both governmental and private. These efforts, except for a \$1,000 donation received from a private firm, proved fruitless.

In total the center received over one and one-half million dollars in direct support. Annual income averaged about \$175,000. During the latter stages this gradually declined. What levels were actually needed in order to sustain and expand operations was never ascertained. Estimates advanced ranged from \$400,000 to \$800,000 annually.

Although the objectives to be achieved during the 1952-53 trial period were not clarified, the center converted to operational status. Sponsoring of symposia and publication of reviews, which had formerly been considered important, were discontinued. Priorities were given to three functions: storage of data, provision of information services, and operation of the screening program.

The center collected data on approximately sixty-three thousand compounds and two hundred and eighteen thousand biological responses. The punched card files contained almost one and one-half million prefiled cards. But in view of the center's intended scope of coverage, the quantity of data stored represented only a meager beginning.

The revised input procedure proved cumbersome. It created unbalanced internal work flows. For example, the biology group between January 1953 and December 1956 coded a total of one hundred and forty-eight thousand lines of data; the number of lines completely processed (coded, and inspected twice) and released for final use totalled ninety-six thousand lines. The difference of over fifty thousand lines represented a backlog of more than one year's production. This problem was never resolved.

Accurate cost studies were never conducted. One estimate placed the cost per article processed at \$29.46, the cost per compound coded at \$5.43, and \$2.18 as the cost per line of biological data. A second estimate based on the number of code sheets completely processed and released for filing during fiscal year 1955 placed input costs at \$3.67 (chemistry



and biology) per line of data processed, or \$50.00 per article.

Coding errors and inconsistency of data were constant problems. The center adopted direct coding to reduce coding errors, but this proved ineffective.

Control of internal processing was not the only problem. The center had to deal with external inconsistencies which were beyond their control; these included inconsistencies in scientific nomenclature, incomplete reporting of test results, and variations in testing procedures.

The center's principal means of demonstrating its value to sponsors and the scientific community at large was the provision of information. As recommended by the evaluation committees, the information service was accorded top priority. The center's facilities were extended to members of sponsoring agencies, members of official screening agencies, and other qualified scientists. Requests for information came from all parts of the scientific community. In total the center processed slightly over thirteen hundred requests. The heaviest demands were received from private companies and academic institutions, none of which contributed to the center's support.

A study of 1,025 requests received at the center between January 1953 and October 1956 shows that one-third of the requests were answered, one-quarter partially answered, and the remaining 45 per cent unanswered. The sole criterion employed in this evaluation was whether or not the information requested was supplied. For example, related information might have been useful, but such information was not considered an answer.

The time lapse between receipt of requests and sending of replies ranged from one day to more than one year. Three-fifths of the requests were handled in two weeks or less. During the latter stages of operations, a backlog of unprocessed requests accumulated, and by the middle of 1955, it amounted to almost eighty requests.

To determine whether the center made a unique bibliographic contribution, the sources used in answering questions were investigated. This analysis revealed that of the requests answered or partially answered, only one-third were based on data originating in the center's files. The remaining answers came from conventional indexes, abstracting bulletins, bibliographies, textbooks, etc. Machine utilization in the retrieval process was low. Records indicated that the machines were employed in answering from 3 to 15 per cent of the requests, and that during the latter stages the punched card files were consulted almost exclusively on a manual basis.

Retrieval costs per request was estimated by the center variously at \$60.00 and \$150.00—the first figure based on unit costs, the second on over-all operational costs. The analysis of information requests described above showed that input costs, based on 1955 cost figures, per successful use of the files was approximately \$1,850.

A primary objective of the center had been to develop techniques for performing chemical-biological correlation studies. Between 1953 and 1956 almost fifty questions involving chemical-biological correlations were received at the center, but no correlation studies were undertaken. The reason most commonly cited was insufficient data.

The screening program was intended to facilitate the preliminary testing or screening of compounds on a variety of plants, animals, and microorganisms by making compounds available to scientists, to collect unpublished data, and to disseminate these data. In total, over ten thousand different compounds were offered to screening agencies and others. Screeners selected 55,000 samples, of which the center was able to supply 75 per cent.

The center received approximately forty-two thousand lines of data as a result of screening activities. Sponsors or sponsor-related organizations accounted for 40

per cent of the data received. Seventy-five per cent of the data were eventually published in the center's publication, the *Summary Tables of Biological Tests*. Four companies reported in 1955 that they had compounds in pilot plant or some stage of commercial development as a result of the program. There was no evidence, however, that many compounds were developed commercially. The major deterrent to commercial development, as expressed by most individuals, was inadequate patent protection.

Costs of the screening program were relatively fixed. Over-all costs per compound ranged between \$30,000 and \$35,000. Input costs per line of screening data were estimated to be \$.85. This figure did not include costs of administering the program, handling compounds, correspondence, etc. With these additional factors included, the cost per line was found to be over \$6.00, which was almost double the cost of processing data from the literature.

Early in 1957, the NAS-NRC announced the termination of the center. Inability to attract stable, long-range financing was cited by the academy as the basis for its decision. Reaction ran the gamut from disgust to complete agreement. Some believed the center was accomplishing an important job and should have been allowed to continue. They pointed to the screening program, the development of the codes, and the information service as positive achievements. Conversely, others felt the center had been unable to define or limit its objectives and scope of operations, which ultimately led to dilution of programs.

While the center failed, its design and operation typified those of information centers now in existence. This is particularly true with reference to the intellectual and mechanical skills which are required to operate such organizations. The investigation of CBCC showed that the operation of information centers such as the CBCC requires four categories of skills

which are not necessarily provided by a staff consisting entirely of scientists; these skills are subject specialization, bibliographic competence, knowledge in depth of the devices and mechanisms available for achievement of bibliographic operations, and administrative ability.

The development of codes requires specialized subject knowledge. To satisfy these substantive intellectual requirements, it is necessary to employ individuals with specialized subject backgrounds. Equally important in code development, however, is the formulation and standardization of definitions, cross-referring of synonyms, and the construction of notational schemes. These tasks require the skills of the indexer and code builder, and these skills are not necessarily provided by men with specialized subject knowledge.

Bibliographic competence can be divided into two aspects. The first is the ability to achieve control of the literature. To achieve bibliographic control, it is necessary to have a thorough knowledge of the bibliographic structure of areas pertinent to an organization's interests. The second is the ability to convert information (by coding, indexing, abstracting, etc.) into a form suitable for storage, retrieval, and dissemination. These functions require competence in bibliographic principles and associated skills, such as indexing, code construction, abstracting, cataloging, and the provision of reference services.

While the codes (this would include any technique employed for analyzing subject content) provide the intellectual framework within which data can be organized, stored, and retrieved, the procedures and devices adopted for storage and retrieval provide the "mechanical" framework for handling data. This function requires knowledge of information handling systems, both manual and machine, and of the capabilities and limitations of each system, so that selection of an optimum system can be based on a

(Continued on page 20)

# The Use of Overseas Central Cataloging in Australia with Special Reference to Library of Congress Cataloging

By JOHN METCALFE

LIBRARY OF CONGRESS cataloging as a form of central cataloging has taken the place of British cataloging in British countries, and in particular Australia. It is, however, one library's cataloging, and on the all important subject cataloging or information retrieval side, in its subject headings and their arrangement, it is, in its own words, "the product of evolutionary forces" from 1897 to date. Not all its headings are the fittest to survive; they are not evenly up-to-date in choice, and they are inconsistent in form, so that for information retrieval they are a functionally inferior mixture.

This paper does not propose to be an exhaustive proof of these propositions, nor is it the result of an exhaustive study; it is rather evidence that there should be one—constructive as well as destructive—of by-product central cataloging becoming the cataloging not only of libraries in its own country, not only of libraries fairly contemporary with it, but also of new libraries—new bottles in which the old wine turned to vinegar is being increasingly poured; of libraries in foreign countries (which are however close, "free world" allies of America in every respect).

In two books, one 1957 and one 1959, both published in America, the writer attempted a more general and exhaustive study, mainly at the technical level; in this he found far more fault with other

*Mr. Metcalfe is University Librarian, University of New South Wales. His paper is here reprinted with permission from Seminar on Technical Services, Baillieu Library, University of Melbourne, 17-18 August, 1961, directed by Maurice F. Tauber, edited by Ira D. Raymond. (Canberra: Australian Advisory Council on Advisory Services, 1962.)*

cataloging methods than he did with those of LC and said somewhere in it that LC cataloging should be criticized, not because it is bad, but because it is so good, with so much achievement and so much promise, so widely found useable and used; whereas most of the panaceas which are its competitors have got little further than boast and ballyhoo—in which LC does not indulge—even in its own country. Of course LC cataloging as central cataloging is not that of a system under one authority. It is of the take it or leave it kind, you don't have to take it if you don't want to, not even in America. It is offered and taken, but not with clear explanation or understanding of just what it is; not with enough *caveat emptor*, yet with immense prestige and authority of a moral kind. The allegations being made cannot only be of foreign interest, but the writer is not telling Americans—it would be impertinent of him to do so—and opinion of the relevance to the home situation of what he has to say must be entirely their own.



The BM Catalogue in its still latest complete edition, in volumes, was once much used in some Australian research and reference libraries, both university and public. In one in which I worked, constant reference to it in a recataloging program was, I think, a strong influence in giving the new catalog a bibliographical bias, and in drawing interest and attention away from the essential indexing function of a library catalog, especially on the subject side. Being only an author catalog it was no use on the subject side; it is not linked with the library's subject index by any tracing notes, and this is only in quinquennial cumulations without any current supplementation. Also it is alphabetico-classed, whereas subject cataloging in Australia as in America is mainly alphabetico-specific, more or less based on Cutter's Rules. Even at the time when British and BM Catalogue influence were at their height the ALA subject headings list was a tool, at least for reference, although Australia had produced one of its own in 1896 (with a fourth edition in 1902) in H. C. L. Anderson's *Guide to the System of Cataloguing*, of the Public Library of New South Wales. In 1934 Charles Martel told me that this list, and Anderson's 101 rules had been used in the formative years of the present LC catalog.

We knew of the current availability of LC cards, but thought of them as printed cards, not as a subject cataloging service, and made little or no use of them. We were not able to accommodate a depository set anywhere in the country although one stood on offer to us. The first LC influence on our cataloging was through its published headings list. I was at the reference desk but had become interested in subject cataloging, and I well remember first coming across headings with round bracketed qualifications, where I would have expected just phrases or sub-headings in our catalog, and, horror of horrors, an upward *see* reference, from specific to general.

I traced these innovations to their source and found, as happened increasingly, that a cataloger laudably eager for turnover or put-through had found a secret or private weapon not in general use; but I could not make my point that there should be—and had been in our catalog—entry which, if it was not always as specific as it could have been, was at least not explicit class entry with upward reference, and a consistency of form and function or logic in headings on which arrangement or filing depended, and on which in turn indexing efficiency depended, and that LC practice cut across all this. Apart from being put in my place, I was met with counter-argument, which has been used in America, that the dictionary catalog is illogical, and anyway the public doesn't understand. Of course alphabetical arrangement is not illogical for its own purposes. It is a perfect form of classification, as Jevons pointed out in 1873, and it will allow—even with specific entry—of very useful classified sub-orders in its arrangement. The LC rules or arrangement are based on this, but the possibilities are largely nullified in its own cataloging by the formal inconsistencies of its headings. As for the public not understanding, I usually found this to mean that the catalogers do not understand a relation of form of headings and their arrangement which would benefit users even though they were not aware of its logical basis.

LC cataloging is like that of any old established card catalog, only more so than most, and what is wrong with its by-product central cataloging is the inconsistencies that come with the cumulation, which is the only virtue of the card catalog. Even this might not be so bad if the results were sufficiently understood but its own explanation in its introduction to its headings list is not read, or if it is, it is too guarded and not explicitly enough a warning. In consequence new editions of the list are assumed to be 'updated,' somewhat as the sixteenth edition of DC

is, and the list is taken as an ideal one, issued as such by a great authority. A very leading American librarian, in administration, once assured me that there could not be any inconsistencies in the list, and that if only he could get hold of his head cataloger and it was a weekend or holiday, she would be able to explain to me just how consistent were such headings as Artificial flowers, and Flies, Artificial; Animals, Legends and stories of, and Birds—Legends and stories. Another leading librarian who had worked in LC freely admitted the inconsistencies, which are going directly into comparatively new catalogs, or indirectly through the Sears popular abridgment of the LC headings, or through local central cataloging.

The use of cataloging aids is promoted by patriotism or feeling for another country which is at least neutral—not definitely hostile—but these are not enough. The goods have to have a genuine selling point, and they have to be delivered. The old BM Catalogue had the very important selling point that up to a point it was complete in a set of volumes that did not take up the room of a card catalog; and it was delivered. I remember it in one cataloging room slowly but surely weighing a great revolving bookcase down through the floor, and in another filling a press and bound in kangaroo skin. When I told some American librarians about this, nearly thirty years ago, one asked if the volumes had pockets, and I have been grateful for the story ever since. Quite apart from any abstract loyalty, and veneration for a library that still had a name to conjure with, the BM Catalogue was there, to impress itself on every young librarian. But it was dating; a new edition was announced in a very promising prospectus, and we put our money on the line, but over decades it made little progress, and only recently it has been started all over again, in the way in which it should have been begun originally. And not only with this but other things there was an ever increasing gap, or vacuum,

and America was filling it, whether we liked it or not; we did not have to be Americanized to have a use and a need for the Wilson indexes, the *Engineering Index*, and by far the most useful and used abstracts, *Chemical Abstracts*. The only headings lists we had with up-to-date subject coverage, though inconsistent forms, were LC and Sears.

The only new British attempt, and opportunity, was BNB, the *British National Bibliography*. This was, and is, a useful classified book selection aid, and in this respect it was better than any American offering until some years later; but as well as being promoted as this, and as British to the backbone—with an association with the British Museum which sounded to be more than it was—it was also promoted as a cataloging aid, as in effect the British answer to LC (as years earlier Brown's now dead subject classification was supposed to be the scholarly, scientific, and British answer to Dewey). Orthodox tracing notes to BNB entries, of both subject headings and class numbers, would have made them a cataloging aid for both the dictionary and the classified catalog, and with some initiative and organization on the part of the British Museum or BNB Council they could have been supported by a list of subject headings—a British list—or an arrangement might have been made to use LC headings. The writer advocated and begged for something like this, for the colonial dictionary catalog customers whose subscriptions were being solicited, but nothing of the sort was done. BNB was made what it still is, a propaganda instrument for very unorthodox and much questioned theories of classification and alphabetical indexing, based on class number analysis, and what may prove to have been the last opportunity of restoring British and British Museum prestige and usefulness in central cataloging for, at least, British Commonwealth countries was sacrificed to the enthusiasm of a few for a new panacea, out of which they still dream of extracting

subject headings and references by their chain analysis of class numbers which have to be impossibly elaborated for no other purpose: whom the gods destroy they first make mad.

Despite British assumptions of its Americanization, Australia and its libraries still buy far more British than American published books, but the imprints in BNB itself show that an increasing proportion of British published books—and especially of those bought for reference and research libraries—is one of American books issued in both countries. These are of course cataloged by LC, and in addition LC catalogs books in English which are not American or British, which BNB does not do. It catalogs them, as well as other foreign books, in astonishing numbers, and with no longer the time lag which was once threatening its efficiency and its support. Its proof copy cards by air mail are now reasonably up-to-date book selection aids and they can be used in integrated processing from selection to dictionary cataloging, as BNB cards cannot be, so that it is becoming doubtful whether these are now worth getting by air mail.

These proof copy cards are only part of what may be called, on analogy with population explosion, a bibliographical explosion, or chain reaction, which began overseas from America with the general availability after the 1939-45 war of the LC catalog in volume form—only an author catalog—but with the familiar unit card tracing note, and a little later with current supplementation and cumulation in volume form. What the British Museum at first did not do—photoprint its catalog from its slip catalog—was done first by some enthusiasts and then by LC itself, from LC cards. LC cataloging was now in overseas libraries, and it was complete and up-to-date in ways in which BM or BNB cataloging were not intended to be. The situation of about thirty years earlier was more than reversed. LC cata-

loging could be used to full advantage, but also it could be swallowed, hook, line and sinker. Not only the form of headings but also subject determination and heading assignment could be taken, uncritically, completely, from the tracing notes of LC entries, and by this we may in some important respects be sunk. The disease of LC headings, from being only sporadic, may become—may have already become—epidemic and pandemic with further risk that not only may the forms of LC headings be not as good as they might be, but in addition its determination of the subjects of particular books and its assignment of headings may not be as good, on the average, as they might be. The greatest danger of centralization and standardization becomes very real.

Many British librarians had always used standardization or uniformity in itself as an argument against it and so against centralized cataloging, but this was through years when their own diversity did not show up very well against American uniformity, and in any case uniformity itself is hardly a fault in this field any more than in book printing. The obvious danger, however, still flows from centralization—that if there are defects at the center then they are everywhere—and here we have centralized cataloging in a rapidly increasing volume taken to or coming down from an international or supranational level, with the added dangers that the final source is one library in one nation with perhaps some cooperative control nationally but none internationally; and that the cataloging is not primarily central cataloging; as such it is simply by-product cataloging, with its only justification in economy.

Now the question is, what damage, what amount or sum total of damage is being done, if any, and this question is put here rather than answered. In any assessment there must be either an assumption that what may be wrong should



be righted at all costs, or an assumption that there is possibly some compensation in other directions and that the account must be balanced as one of profit and loss if there is profit or gain in having LC more or less uncritically copied; and there is some gain. A mere glance at what the other fellow has already done is helpful, even if we end in doing the opposite; if we go—as we may be justified in going—to the other extreme, local cataloging can be reduced to completely uncritical copying of central cataloging. There need not even be copying; ready-made cards complete with headings can be filed, and even this may be done mechanically according to some punching of the ready-made cards, with all the advantages of nutrition without mastication and health without exercise; the century old dream of central cataloging would be complete reality, perhaps, just as the manless missiles were raining down.

Just before his death in 1903 Cutter said in the Preface to the fourth and latest edition of his rules, "On seeing the great success of . . . Congress cataloguing . . . I cannot help thinking that the golden age . . . is over, and that difficulties and discussions which have furnished an innocent pleasure to so many will interest them no more." The end of an age, if it is ended, was not as close as he thought then but there is no doubt that the difficulties, real or imagined (or only difficult to insufficiently able and trained people) and the associated discussions with all their innocent pleasure have brought local or independent cataloging into disrepute and have come near to ending the halcyon days, willy nilly and at whatever cost to the functional as opposed to the processing efficiency of cataloging. In terms of the labor and the money that is in fact being allowed for cataloging even by an affluent society, and for librarianship, and bibliography, and documentation, and information retrieval altogether, there is a need and an insistent demand from ad-

ministrators and purse-bearers for economy in the cataloging process.

Librarians reply that what is sometimes expected or supposed by laymen to be all that is really needed is not as simple as they think and not enough for functional efficiency, but most librarians themselves and many catalogers are in some agreement, and many are prepared to pay for processing economy a price in possible loss of functional efficiency which they may not look at closely. They may simply want to recommend themselves as administrators and budget-balancers, or may not themselves be professionally competent or experienced enough to know how bad or how good cataloging can be, and how. Cataloging is at the very heart of librarianship, and yet it has become a special mystery in more senses than one and many chief librarians or directors assert almost with pride that they know nothing about cataloging and cannot discuss the simplest problem in it without calling for their head cataloger, who in the management of his or her special domain can often rely on the boss's ignorance.

Cataloging is in large part a mystery, especially on the subject side, because it has not been much more than half solved with general agreement on the solution, or the teaching of it, and this is a major factor in the present situation. Despite the efforts of Cutter and others there is as yet no body of theory and practice which is generally accepted as the means of maximum efficiency. Bibliosophists cry lo here and lo there, with astrology where there should be astronomy and alchemy where there should be chemistry. Administrators and even catalogers are sceptical of what can so easily be dismissed as perfectionism. And an unfortunate conclusion may be drawn that many catalogers might as well be replaced by clerks just copying LC, because they have not been taught, or have not learned, principles on which to criticize and improve LC. Now,

before drawing further conclusions, what sort of thing is supposed to be wrong with LC subject cataloging?

We can state very briefly as to subject determination and headings assignment, that the specific subject qualification or limitation of a book is not always clearly realized or distinguished, and to be on the safe side the cataloger has given the book too many entries, which reduces both processing economy and functional efficiency; that what has been called a fifth column in the catalog is common—that is, the use of title word entry instead of, or to supplement, proper subject entry, usually because there is not an appropriate heading already in the list and the process of getting a new one in is probably too troublesome and time consuming; it is not sufficiently realized that some catalogers in LC probably work to the list as it is, and make it a procrustean bed for their cataloging, just as half-trained, inexperienced local catalogers often do with the very much abridged Sears. As to the supposedly basic principle of its cataloging, there is considerable if not quantitatively important use of class entry with upward reference which reduces functional efficiency; for example, an inquirer looking under "Milk Substitutes" is referred to "Food Substitutes," and out of the many more entries under this he has to sort out those for literature on Milk Substitutes, which is not good information retrieval in a catalog which does distinguish about sixty kinds of dog and has at last got round to distinguishing some kinds of football as well as Soccer. As to the form of headings there are such inconsistencies as "Artificial Limbs," but "Eyes, Artificial"; "Agricultural Research" and "Agricultural Exhibitions," but "Agriculture—Competitions," and "Architecture—Exhibitions"; "Composition (Music)," but "Music—Interpretation"; "Cats—Legends and Stories," but "Cats (in Religion, Folklore, etc.)" and "Cats in Literature," without the brackets. Such ex-

amples could be multiplied by the hundred. They are not justified by usage, that is, by differences which the inquirer would expect and anticipate. They make for reduced economy in processing because they increase the number of cross references to be put in and the number of filing difficulties, and they reduce functional efficiency because they increase cross reference use, and reduce the subject or subject aspect grouping which is quite possible and allowable with specific entry—mainly by the use of subheadings—and is well established in its own headings.

Such inconsistencies are understandable and excusable in a large catalog with long cumulation and would be found in many smaller and younger catalogs. It is understandable that they are being copied into many smaller and younger catalogs when it is realized, first, that LC central cataloging, and its headings list as an aid, are only by-products of its cataloging of its own collections; and, second, that this central cataloging is only an unmodified by-product of its own cataloging and all the implications and consequences are not generally realized. We are getting highly centralized cataloging cheap, without realizing the price we may really be paying in the product. All these suggested defects in LC cataloging and its transmission as central cataloging may be quantitatively serious, or they may be only the magnification of a perfectionist riding a hobby horse, but their removal or reduction would mean some improvement in both processing economy and functional efficiency in cataloging based on that of LC. But how could they be removed or reduced?

LC cataloging is published for more purposes than central cataloging through copying, though this is a lot of the justification and use of its publication. But published bibliography with or without uses other than central cataloging need not be the cataloging of a particular li-

brary, as that of BNB shows, but some association with a library can be useful, as BNB also shows; its cataloging is not done by the British Museum, but is done in it from the Museum's acquisitions, especially its copyright deposit acquisitions. The BM Catalogue and its Subject Index are certainly not BNB's Ranganathanite version of DC classified cataloging, but in their preparation some use may now be made of BNB entries. The point is that there may be economical advantage, and even necessity in some association of a large library and its acquisitions with centralized cataloging for other libraries, but there need not be identification of cataloging, either way.

The writer had something to do with another, far, far less important case than either LC or BNB. In this, central cataloging was done mainly but not entirely from a large library's own acquisitions, and this central cataloging was then modified in the library's own cataloging of those acquisitions. It had to be modified for the same reasons the other way round that LC cataloging needs modification; for example "Economics" was used as a heading in the central cataloging for other libraries but the central library was still using "Political Economy" as a heading because it had hundreds of entries under it. The central library's cataloging could have been modified for central cataloging, which would probably have been delayed by this order; or the central library's cataloging could have been published on the do-what-you-like-with-it principle, but this would have defeated the purpose of aiding comparatively inexperienced catalogers by giving them up-to-date headings and of checking the spread of infection from an old, long cumulated catalog. It may not be irrelevant to notice that some British librarians say that cataloging in their large urban and county library systems is primarily cataloging for branches—that the cataloging of the central reference library is often subordinated

to this and made a mere makeshift adaptation of it. We must be careful to look both ways, and upwards and downwards, before stepping off the pavement we are on.

By-product central cataloging looks the cheapest, but even this may not be certain; two associated cataloging processes and two associated processing bodies, even though there is association and co-operation, appear to raise costs; but they also distribute costs and may reduce a deflection of one of the bodies from its original purpose. Whether justified by its original charter or not, the British Museum seems very wary of taking on what are now thought to be functions of a national library; the Library of Congress on the other hand has embraced those functions and may have given them their current definition but not without recurrent complaint that it is, after all, the Library of Congress. The setting up of a separate body of council for central cataloging—but working in close association with LC—might meet some of these complaints at what would be comparatively small cost, especially if the services rendered were not so much thought of as a by-product to be given away. The desire to give away, to help as freely as possible may have motivated and justified the by-product line of thought and economy and at the same time made the thinkers blind to some of the by-products of the by-product approach. For what the information may be worth, there is now in Australia an Advisory Council on Bibliographical Services which directs the work of, but does not administer a bibliographical center; this was in a parliamentary library which was also a national library on the LC plan but the two have been recently separated and the bibliographical center (with the same relation with AACOBs) is now in the National Library of Australia.

Central cataloging associated but not identified with that of a particular library



can be more flexible, directed to and even varied according to the needs of its users, but it must have a consistent practice or it will not avoid inconsistencies, partly caused—as LC says of its own headings—by “varying theories of subject heading practice over the years.”

In the writer's view, and of course he is not alone, a new body of theory and practice must be laid down and taught not only as the basis for the specific entry of the dictionary catalog, divided or undivided, but also as the basis of any indexing or information retrieval. He does not accept the view that documentation or information retrieval must be, or is, essentially different from library subject cataloging, but he does think that librarians who have neglected their own half-solved problems of cataloging are at least as much to blame for the opposition of information retrieval and library cataloging as the amateurs, the engineers, and the chemists are, with their usually ignorant and prejudiced assumptions of what is covered by the word cataloging. He is sceptical of theorizing with little relation to the proven theory and practice of the past, and of new names for old things such as documentation and information

retrieval for subject indexing, descriptors for subject headings, and so on; he thinks Cutter in his specific entry definitions and rules and Kaiser with his concrete-process breakdown made permanent progress, independently but essentially on the same lines. Theirs were major steps towards logical subject indexing, whether mechanized or not, and whether arrangements of subject names such as theirs are used directly or indirectly.

Cutter's theory and practice was exemplified in LC cataloging in its subject headings, though with some unexpected deviations from the master. The writer thinks a development of Cutter's practice, and Kaiser's, should be exemplified in an ideal subject headings list, the compilation of which would be the inductive corrective of the deductive approach, from principles. But this would be detail at the technical level. The cataloging in question is American, and even as it is—though we may receive it critically—we receive it with admiration and gratitude. Whatever might be done to improve it would have to be done in America, and whatever is done or not done, we hope that we may continue to receive it with admiration and gratitude. ■■

## Information Centers . . .

*(Continued from page 12)*

comparative study of alternative approaches. Without comparative studies it is not possible to demonstrate objectively the practicability of any system.

Finally, the study underscored the importance of administration. An information center, like any other organization, is

subject to the principles of administration. While this is axiomatic, and certainly not startling, its importance has again been demonstrated. In the absence of sound administration, it will be difficult, if not impossible, to blend the varied skills described above into an integrated, effective organization. ■■

# Winchell, Walford, or Malclès?

By FRANCES SEAHOLM

"WINCHELL" is, of course, *Guide to Reference Books*, the seventh and current edition of which is edited by Constance M. Winchell. "Walford" is Arthur J. Walford's *Guide to Reference Material*, similar to Winchell but slanted for Great Britain. And "Malclès" refers to Louise-Noëlle Malclès's three-volume *Les Sources du travail bibliographique*, which is in a general way the French counterpart to the other two works.

Winchell, Walford, or Malclès?

Large libraries need not make a choice; they can afford to have them all on hand. The smaller library picks Winchell first, Walford next, and Malclès last or not at all (for reasons of cost and emphasis).

But does any one of them do all that a general guide to reference materials could and should? What are the strengths and weaknesses of each? As a step toward evaluation, a comparative study was made of the three works.

Indexing is vitally important to such books as these. All had scatterings of misprints, misspellings, and in some cases incorrect page numbers. Apart from these common faults, the differences, in an area in which there should be standardized quality, are startling.

Winchell's index is the most satisfactory of the three. She usually has both author and title entries, and subject entries are scattered throughout, as they are in all three guides. Walford sometimes gives both author and title entries, but he is equally likely to give just author entries. Occasionally where an author entry would be expected, he will have a title entry instead.

Both of these books follow the author entry in the index with the title of each work in the book and its page number.

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This is never done by Malclès, and it is this omission which makes her index the least satisfactory. She gives the name of the author and lists the numbers of the pages on which his works appear. (Generally if there is an author only author entry is given.) It is then necessary to check each page listed to discover which bears the desired work. With prolific authors there may be as many as eight or ten pages to glance over. And should the author's name be a common one and the Christian names not known, the number of pages that require checking may easily exceed the patience of the searcher.

Another inconvenience presented by Malclès is the number of indexes. (Winchell, too, suffers from this problem when her supplements are considered.) Malclès has three indexes, one at the end of each complete volume. Because the volumes were issued at different times, this is unavoidable. However, the last index might well have included page numbers in previous volumes for works appearing not only in Volume III but also in previous volumes.

In the standard library custom, all three of these works index Mac and Mc together alphabetically—but Malclès actually spells Mc as M-a-c!

Except for occasional comments, usually on additional sources, Walford has no introductory material other than the introduction to the book. The other two works contain such material at the beginnings of chapters, at subject classification divisions, etc. Malclès devotes 11.15 per cent of *Les Sources* to introductory material, 192.62 of her 1772 pages. Winchell

TABLE 1

WALFORD		WINCHELL		MALCLÈS	
	Per cent		Per cent	Volume	Per cent
0 Generalities . . . . .	12.55	A-G	21.98	Vol. I	22.62
1 Philosophy & psychology	1.67	H-J	1.17	II <sup>a</sup> Ch. 17	3.30
2 Religion . . . . .	4.18	K	5.06	II <sup>a</sup> Ch. 13	3.05
3 Social sciences . . . . .	13.60	L	13.23	II <sup>a</sup> Ch. 16	5.18
4&8 Languages & literature	16.11	M-R	21.21	II <sup>a</sup> Ch. 3, 8-12	13.74
5&6 Science & technology	3.77	.....	.....	III Ch. 1, 2	1.88
5 Mathematics & natural sciences	6.07	N	8.11	II <sup>a</sup> Ch. 2, 5-7; III Ch. 3-11	32.60
6 Applied sciences . . . . .	15.06	P	6.64	III Ch. 12, 13	6.16
7 The arts . . . . .	8.79	Q	5.64	II <sup>a</sup> Ch. 15	3.24
9 Geography, Biography, History	.....	.....	.....	.....	.....
91 Geography, exploration & travel	3.35	U	3.31	II <sup>a</sup> Ch. 14	1.43
92 Biography . . . . .	5.02	S-T	5.64		
93 History . . . . .	9.83	V	7.98	II <sup>a</sup> Ch. 4	.....

uses 23.6 pages, 4.6 per cent of her total of 512, for such work.

Malclès and Winchell differ considerably in type as well as amount of this material. Malclès emphasizes the scholarly and Winchell the practical, library-oriented point of view. For example, Chapter two of Volume I of *Les Sources* concerns bibliographies of bibliographies and is roughly equivalent to Winchell's section A, subsection "Bibliography." In *Les Sources*, eleven pages (pp. 15-25) consist of introductory material, followed by a bibliography. The introduction discusses

the forms, principles, and aims of bibliographies of bibliographies. Winchell has a third of page five of her *Guide* given over to introductory material for the general section on bibliography, emphasizing the importance of bibliography in the library.

Malclès's section on library catalogs, Chapter five of Volume I, discusses in five pages the importance of these catalogs, how they are made, the various ways of arranging them, and the great libraries and their advantages. Winchell in a fourth of page eight stresses the usefulness of library catalogs to catalogers and reference

TABLE 2  
TOP TEN COUNTRIES OF ORIGIN OF BOOKS

COUNTRY	WALFORD		WINCHELL		MALCLÈS	
	Number	Per cent	Number	Per cent	Number	Per cent
United States . . . . .	60	15.31	400	42.37	424	17.17
Great Britain . . . . .	230	58.65	163	17.27	275	11.13
Germany . . . . .	23	5.87	104	11.02	354	14.33
France . . . . .	18	4.59	58	6.14	737	29.84
Latin America . . . . .	.....	.....	42	4.45	.....	.....
Italy . . . . .	6	1.53	21	2.22	136	5.51
Switzerland . . . . .	5	1.28	18	1.91	44	1.78
Holland . . . . .	.....	.....	18	1.91	.....	.....
Russia . . . . .	5	1.28	17	1.80	67	2.71
British Commonwealth . . . . .	9	2.30	16	1.70	.....	.....
Belgium . . . . .	7	1.79	.....	.....	61	2.47
Spain . . . . .	.....	.....	.....	.....	56	2.27
Scandinavia . . . . .	.....	.....	.....	.....	51	2.06
Others . . . . .	6	1.53	.....	.....	.....	.....



workers, and explains in one paragraph the advantages of the great national libraries.

The number of pages allotted to each general subject group in each of the guides was counted. Generalities (used here as in Walford's section "O"—thus including such materials as general, universal, and national bibliographies, encyclopedias, newspapers, government documents, etc.) received top billing in Winchell, languages and literature in Walford, and mathematics and natural sciences in Malclès. See Table 1.

A ten per cent sampling of the works in each guide was made to determine which countries produced the greatest numbers of listings. The United States, Great Britain, France, and Germany were the "big four" in all three guides. Rather unexpectedly, materials published in the United States were second highest in representation in Malclès. Indeed, in Volume III of *Les Sources*, more of the books cited were American than French. Russia received its best treatment in Malclès, with 2.71 per cent representation, while Winchell's percentage was 1.80 and Walford's 1.28. See Table 2.

Which of the three guides to reference sources lists the largest percentage of truly "reference" works? To answer this question, each guide, including the first three supplements to Winchell, was checked completely. The materials cited were sorted into eight divisions as follows:

1. Reference books—dictionaries, biographies, bibliographies, encyclopedias, tables (mathematical, etc.), directories, almanacs, abstracts, field guides to animals and birds, etc.
2. Histories—books dealing with the history of a period or subject field.
3. Textbooks—textbook type works and standard works in a field, treatises, conference reports, series of papers, handbooks, etc.
4. Periodicals—serial publications appearing more frequently than once a year.
5. Reference periodicals—periodicals which are wholly of reference rather than general periodical nature (bibliographic, biographic, indexing, etc.).
6. Articles—items cited which are not in themselves books or periodicals but which appear in books or periodicals.

Reference books make up the largest portion of each guide, but the percentage of reference books in the total number of works cited differs considerably from guide to guide. In Winchell, including supplements, 7001 of the 8135 works were reference works, a percentage of 86.06. The 2890 reference works in Walford made a lower 76.41 per cent. Although the number of reference works in Malclès was almost as large as the total of the Winchell citations, the 8123 works were only 34.55 per cent of Malclès's total. See Table 3.

TABLE 3

	WALFORD		WINCHELL		MALCLÈS	
	Number	Per cent	Number	Per cent	Number	Per cent
Reference materials . . . . .	2890	76.41	7001	86.06	8123	34.55
Histories . . . . .	319	8.43	235	2.89	3221	13.70
Textbooks . . . . .	370	9.78	632	7.77	6770	28.79
Periodicals . . . . .	17	0.45	10	0.12	3951	16.80
Reference periodicals . . . . .	169	4.47	245	3.01	895	3.81
Reference articles . . . . .	16	0.42	12	0.15	381	1.62
Textbook articles . . . . .	1	0.03	....	....	133	0.57
Historical articles . . . . .	....	....	....	....	40	0.17
Total, all reference material	3075	81.31	7258	89.22	9399	39.97
Total Works . . . . .	3782		8135		23514	

Annotations are important in a guide to reference books. According to a ten per cent sampling of each guide, annotations receive their greatest emphasis in Walford. Most of his titles—93.46 per cent—are annotated, with 7.63 lines per annotation.

Winchell's percentage of titles annotated is 72.8, with 4.98 lines per annotation. Malclès annotates 38.11 per cent. A line of annotation in Malclès contains roughly twice the number of letters as a line in Winchell or Walford. The average in *Les Sources* is 1.59 lines per annotation, but for purposes of comparison, the number would be figured as 3.18.

In order to establish a list of books annotated by all three guides, titles from four lists of reference books used in courses at the University of Minnesota graduate library school were checked against the entries in each guide. Titles common to all were then analyzed for quality of annotation.

Each of the lists covered a different general subject area. Of the ninety-one items on the bibliography list, thirty-seven were found in all three guides. In humanities, 120 of the 231 works were found in all. Eighty-three of the 216 works on the social science list and eighty-three of the 320 natural science titles were found in all.

This selected list resulted in a group having a much higher percentage of annotated titles, with a larger number of lines per annotation, than the over-all average of each book. See Table 4.

In order to achieve some degree of objectivity in comparing the annotations of each guide, the following criteria were established and checked:

1. Dates covered by the work, where relevant (*e.g.*, *Harper's Encyclopaedia of United States History from 458 A.D. to 1912*).
2. Subject of the work (*e.g.*, *Psychological Index*).
3. Materials covered by the work, where

relevant (*e.g.*, books, pamphlets, periodicals, etc.).

4. Amount and kind of information given in the work (such comments as, "contains long biographical articles of authors with bibliographies of their main works," etc.).
5. Arrangement of material in work.
6. Whether or not annotation evaluates the quality of the work.

These criteria were established on the basis of what the student or potential user of a reference tool would want to know about it before obtaining it. It should be noted that in many cases the title of the work contains considerable information requiring no or only partial assistance from the annotation for clarification. For results, see Table 5.

A subjective evaluation was made of the annotations studied and each was rated, using "average" to mean the basic minimum of information to be expected. Walford had the largest number rating above average, 199, or 66.12 per cent. Winchell had 188, or 59.31 per cent. Malclès had 69 above average, for 21.36 per cent.

Reviewers have noted that Walford is especially strong in annotations, with Winchell a close second, while Malclès gives less attention to this area. The detailed annotation analysis bears out the strength of Walford's annotations, as does subjective evaluation. However, there are certain exceptions. Malclès occasionally offers annotations which are masterpieces of thoroughness and at other times compresses an amazing quantity of information into one or two of her double-length lines. Much better coverage of certain works is given in Malclès than in either Walford or Winchell.

In looking over annotations common to both, one receives the impression that Walford's annotations are sometimes based on those of Winchell, usually undergoing a refining process first, so that the result is more compressed than the

TABLE 4

Subject Area	Malclès	Walford	Winchell
<i>Bibliography</i>			
Per cent of titles annotated . . . . .	97.37	86.84	100
Number of lines of annotation per annotated title . . . . .	4.68 (9.36)	12.316	14.554
<i>Humanities</i>			
Per cent of titles annotated . . . . .	68.6	88.40	99.17
Number of lines of annotation per annotated title . . . . .	3.723 (7.446)	8.537	9.908
<i>Social science</i>			
Per cent of titles annotated . . . . .	48.19	100	100
Number of lines of annotation per annotated title . . . . .	3.15 (6.3)	13.298	12.572
<i>Natural science</i>			
Per cent of titles annotated . . . . .	70	97.59	92.77
Number of lines of annotation per annotated title . . . . .	4.08 (8.16)	10.3	6.716

TABLE 5

CRITERIA	MALCLÈS		WALFORD		WINCHELL	
	Number	Per cent	Number	Per cent	Number	Per cent
<i>Coverage dates</i>	(120 titles for which "coverage dates" are not relevant)					
	Of 203					
Not given . . . . .	69	33.99	54	26.60	49	24.13
Given . . . . .	134	66.01	149	73.40	154	75.86
<i>Subject</i>	Of 323					
Not given . . . . .	6	1.86	7	2.17	6	1.86
Given . . . . .	317	98.14	316	97.85	317	98.14
<i>Included works</i>	(127 titles for which "included works" are not relevant)					
	Of 196					
Not given . . . . .	92	46.94	46	23.47	53	27.04
Given . . . . .	104	53.06	150	76.53	143	72.96
<i>Arrangement</i>	Of 323					
Not given . . . . .	169	52.32	128	39.63	130	40.22
Given . . . . .	154	47.68	195	60.37	193	59.75
<i>Amount and kind of information</i>	Of 323					
Not given . . . . .	266	82.35	176	54.49	187	57.89
Given . . . . .	57	17.65	147	45.51	136	42.11
<i>Evaluation</i>	Of 316 (7 titles not annotated by Malclès)					
			Of 323		Of 323	
Not given . . . . .	278	87.94	219	67.80	210	65.02
Given . . . . .	38	12.05	104	32.20	113	34.98
<i>Total</i>	Of total of 1684		Of 1691		Of 1691	
Not given . . . . .	880	52.26	630	37.26	635	37.55
Given . . . . .	804	47.74	1061	62.74	1056	62.45



original. Both guides quote extensively from prefaces and introductions, and not always from the more illuminating portions. A reduction in the use of this type of material, except where it is especially valuable, would be a space-saver and would not detract from the value of the works. Frequent lists of inclusions or faithful reproductions of tables of contents are not always the help they may seem to be.

The following general suggestions could be made for the correction of weaknesses in each guide:

Malcès's outstanding need is an improved index, one giving title along with page number under an author's name. In Volumes I and II, the Balkan and Slavic countries should be integrated into the major subject groupings. At present, the works of these countries are listed under the country rather than under the subject as are the works of other countries. Some method of supplementation or revision for *Les Sources* should be developed, for the early volumes are now much out of date, and even out of print.

Walford's greatest drawback is the limited number of titles he includes. The work cannot really stand alone and should be used in connection with Winchell.

Winchell's work, and Walford's also, would be improved by more discrimination in the choice of annotation material. Compression and concision would reduce the present volume of the annotations and provide room for a larger number of listings. Consideration should be given to the possibility of replacing extensive historical material about a work with a reference to sources in which this information would be available in greater detail. Care must be used here; and material essential to the use or understanding of a work must not be eliminated in this way.

Citations might be used for full information on the extensive editorial changes which often take up so much space. And perhaps a symbol could replace "gives

author, title, place, publisher, date, volumes, paging, series, prices." This comment occurs in many of the annotations. Where possible, Winchell might summarize the prefaces she loves to quote from, because the complete quotation is often too wordy for a brief annotation.

Both Walford and Winchell would benefit from an increase in the number of listings included. All three works are plagued by problems of currency.

With the present-day increase in the quantity of publications, none of these guides can fill the need for a guide to reference sources. Complete, universal bibliography is, as reviewers so often remark, a thing of the past and the most that can be attained now is a thorough bibliography of a particular subject field. It seems, therefore, that a guide to reference sources should be the key, the top of the pyramid of bibliographic works.

A guide to reference sources should reflect use by librarians, researchers, and students. It must give a broad view of the whole field of reference works to librarians, provide the beginning of a key to subject fields for the researcher, and offer good annotations to students. It must give information on both timeless and current reference works and bibliographies.

To meet all the needs of users of reference guides, a system similar to that of the Wilson indexes could be established. A guide published semi-annually with cumulations every two or three years would insure currency. Each permanent cumulation would have to be independent and complete in itself, as are the various editions of the *Guide to Reference Books*. It would include the best possible annotations for the most vital works. Rather than include extensive historical or editorial information for a particular title, it would refer to articles giving such information in greater detail. In addition, it would include as broad a listing of unannotated reference materials as required.

(Continued on page 31)

# Changes in the Concept of "Scientific Literature"

BY THE EDITORIAL COMMITTEE,  
*Mental Health Book Review Index*

THE CURRENT CONCERN with the fate of scientific writings is not new, but new is the shift in emphasis which has put *information*, not *literature*, in the center of attention. We may wonder what has happened to the literature of science. Has it been superseded by the computer? Or have we, in the excitement over acquiring a gigantic robot memory, suffered a lapse of our human memory and lost sight of scientific literature as a cultural possession?

At the dawn of western civilization, literature and science were intimately linked. Literature not only absorbed the thought of its time, but could express insights that foreshadowed a knowledge yet to come. Thus Lucretius' poem, *De Rerum Natura*, has been acclaimed for showing an amazing foreknowledge of atomic science and electronics. This unity of literature and science lasted as long as a unifying view of the world prevailed. The kinship between the ideas of poets and the poetic response of men of science, still strong in contemporaries like Donne and Kepler, then gave way to a new spirit which severed modern science from literature as an art.

De Quincey was the first to delimit literature clearly as a fine art, excluding from it "all books in which the matter to be communicated is paramount to the manner or form of its communication" and, therefore, excluding "all *science* whatsoever." Thus the expulsion of science from literature became an explicit part of literary theory. De Quincey was

*Ilse Bry, of the Mental Health Book Review Index, and Lois Afflerbach, of the Paul Klapper Library, Queens College, are co-chairmen of this committee. The present essay is published also as an editorial in Mental Health Book Review Index, VIII, [Whole no. 13] (1963), pp. i-iv.*

aware, however, that the common use of the word *literature* was not as discriminating as he would have it: "Popularly, and amongst the thoughtless, it is held to include everything that is printed in a book," or it was a convenient term for expressing inclusively the total books in a language. In a philosophical sense, he asserted, it would be ludicrous to reckon a pharmacopoeia, the Court Calendar, etc., as part of the literature.<sup>1</sup>

Throughout the remainder of the nineteenth century, dictionaries, in their definitions of literature, reflected the adoption of De Quincey's perceptive distinctions but without retaining his value judgments. By the turn of the century it had become necessary to record another meaning: "the whole body of literary productions or writings upon a given subject, or in reference to a particular science or branch of knowledge." Thus in relation to scientific writings in a given field, literature was now again defined in the single, all-inclusive sense which De Quincey had

<sup>1</sup> Thomas De Quincey, "Letters to a Young Man Whose Education Has Been Neglected" (1823), in *The Collected Writings of Thomas De Quincey*, edited by David Masson (new and enl. ed.; Edinburgh: Black, 1890), X, 14 and 17; "The Poetry of Pope" (1848), *ibid.*, XI, 53.

branded as popular, thoughtless, and ludicrous.

At this point science paid a heavy price for being cut off from the humanities and social sciences, with their longer vistas and openness to social and intellectual history. The nineteenth-century structure of disciplines, each thought of as having a literature of its own, was frozen into twentieth-century scientific bibliography. This meant that a concept of "scientific literature" which was static, rigid, and aloof, gained acceptance at the very time when science itself became more than ever dynamic, fluid, and exposed to interaction with the social scene.

There had been no such conflict so long as the concern with scientific writings was retrospective, as, for example, in the Royal Society's *Catalogue of Scientific Papers, 1800-1900*, and in a corresponding French national bibliography.<sup>2</sup> In that case plans drawn up at mid-century were still useful when the work came to fruition at the *fin de siècle*. Different problems arose, however, when the *International Catalogue of Scientific Literature* was launched as an enormous project of international cooperation. It called for "a complete index of current scientific literature" beginning with the year 1901. The basic subject arrangement corresponded to the then recognized disciplines in the exact sciences. It was also felt "that an author's catalogue could not supply the required information, and that it was essential that scientific workers should be kept fully and quickly informed of all new discoveries by means of complete subject indexes."<sup>3</sup> Neither the implicit assumptions nor the language appear to have changed very much over the past

sixty years in the planning of comprehensive, current, scientific information services.

At the turn of the century, a new era began for certain fields of science, for instance, the atomic sciences, genetics, and psychoanalysis. The *International Catalogue of Scientific Literature* achieved on a worldwide scale what would now be called the coordination of scientific information. Here we have the ingredients of a scholarly study laid out for us. We might ask, for example, how new discoveries, as now recognized, found their way to other scientific workers; what else besides information was involved in their further development and acceptance; what this monumental index of current scientific literature actually contributed to the advancement of scientific knowledge, and at what price. By raising this last question, we do not mean the cost in terms of money and manpower, although this, too, may be of interest today. Rather, we refer to the retarding and inhibiting influences which can now be traced to the *International Catalogue*. The undertaking, which commanded the authority and resources of its time, has left its mark on bibliographic and library organization up to the present day.

The *Bibliographie der deutschen naturwissenschaftlichen Litteratur*, also launched in 1901 to report in brief intervals the German material contributed to the annually published *International Catalogue*, but otherwise coordinated with it, permits a close view of the intellectual strait jacket sanctioned by international consent. The ingenuity with which works in the then emerging behavioral sciences were pressed into a scheme already obsolete at its inception is especially remarkable, but it is also deceptive. We might not think of looking in a bibliography severely limited to the exact sciences for the third German edition of Eugen Dühring's *The Marquis de Sade and His Time; Studies in the History of Culture*

<sup>2</sup> Joseph Deniker, *Bibliographies des travaux scientifiques (sciences mathématiques, physiques et naturelles) publiés par les sociétés savantes de la France depuis l'origine jusqu'en 1888*, dressés sous les auspices du Ministère de l'instruction publique. (2 vols.; Paris: Imprimerie Nationale, 1895-1922.)

<sup>3</sup> *International Catalogue of Scientific Literature* . . . 1901-1914. Published for the International Council by the Royal Society of London. (254 vols.; London: 1902-21.)



and *Morals of the Eighteenth Century*. Yet there it is, listed under "Physiology of Reproduction," with a cross reference from "Nervous System."<sup>4</sup>

Such examples might be multiplied, but it is more important to stress the principle: an index of the world's current scientific literature can be *current* only if it is organized within the framework of the contemporaneous trends in scientific thinking and research.

An international convention with the power to reconsider and, if necessary, to revise the regulations and schedules approved for the *International Catalogue*, was to be held in 1905, in 1910, and every tenth year afterwards. This liberal foresight was of no avail. Ostensibly, the project was brought to a halt by the World War. Actually, it was breaking down before that of its own weight. In 1922, a leading American librarian, William Warner Bishop, writing in *Science*, called the surviving set "a monument to the difficulties of the task of an adequate index to the published work of scientists."<sup>5</sup> Four decades later its greatest value might be in helping us to recognize it as a monument to the dangers of attempting to freeze science and, in particular, to the paradox of building obsolete concepts of scientific literature into a new bibliographic system under the guise of the latest advances in information systems management and engineering.

During the past fifty years the link between science and literature that was broken by the rise of modern science in the seventeenth century has begun to be restored. First, there have been significant changes in literary theory. Among the leading ideas here are that literature and science are inseparable expressions

of the creative human spirit and that, while the working processes of science are indeed incompatible with literature, mankind becomes conscious of itself through literature which is both science and art. It has also been fully recognized that science has had an all-pervading influence upon literature, which in turn becomes the vehicle through which science affects men's whole lives and their modes of thought, emotion, and action; and that science has directly contributed works of the highest rank to literature.<sup>6-9</sup>

A history of scientific literature, based on criteria of value, was first clearly envisaged in 1930 in the dissertation, *Studies in the Literature of Natural Science*, by J. M. Drachman.<sup>10</sup> The idea of such a history has since gained in breadth and depth. The progress made may, however, be concealed behind a disclaimer, as in Grant McColley's *Literature and Science; an Anthology from English and American Literature, 1600-1900*,<sup>11</sup> or behind titles which still avoid the word *literature* in the context of *science*, such as *Books That Changed Our Minds*,<sup>12</sup> *Books That Changed the World*,<sup>13</sup> or books that shaped western civilization, as *Molders of the Modern Mind*.<sup>14</sup>

Furthermore, we may consider the di-

<sup>6</sup> Conwy Lloyd Morgan, "Science and Literature," *Transactions of the Royal Society of Literature*, 2d ser., XXIX (1910), 227-53.

<sup>7</sup> Rolfe Arnold Scott-James, *The Making of Literature; Some Principles of Criticism Examined in the Light of Ancient and Modern Theory* (London: Seeker, 1928; New York: Holt, 1930), pp. 336-43.

<sup>8</sup> Grant McColley, ed., *Literature and Science; an Anthology from English and American Literature, 1600-1900* (Chicago: Packard, 1940), pp. v and 350.

<sup>9</sup> Harvey Eagleson, "The Beginning of Modern Literature," *Stanford Studies in Language and Literature* (1941), pp. 348-60.

<sup>10</sup> Julian Moses Drachman, *Studies in the Literature of Natural Science* (New York: Macmillan, 1930). Thesis (Ph.D.), Columbia University; also issued without thesis note.

<sup>11</sup> *Op. cit.*, p. 4.

<sup>12</sup> Malcolm Cowley and Bernard Smith, eds. *Books That Changed Our Minds* (New York: Doubleday, Doran, 1939; 1940).

<sup>13</sup> Robert Bingham Downs, *Books That Changed the World* (Chicago: ALA, 1956).

<sup>14</sup> Robert Bingham Downs, *Molders of the Modern Mind; 111 Books That Shaped Western Civilization* (New York: Barnes & Noble, 1961).

<sup>4</sup> *Bibliographie der deutschen naturwissenschaftlichen Litteratur*, hrsg. im Auftrage des Reichsamtes des Innern vom Deutschen Bureau der Internationalen Bibliographie in Berlin. I. Bd. (1901-1902) (Jena: Fischer, 1902), pp. 1258, 1263.

<sup>5</sup> "The Record of Science," *Science*, LVI (1922), 214.

versity of forms of writing and publication as a matrix for scientific literature. The past fifty or a hundred years were rich in developments which, while provoking some reaction in the humanities, have gone almost unnoticed in science; for instance, the *Festschrift*, the invited lecture, the prize essay, the editorial and letter to the editor, the book review and rebuttal, the selected bibliography, and the monographic series or single book appearing under the editorship of a distinguished scholar or scientist. Not only has little been done to study their place and function in scientific discourse, but they are usually omitted from the major scientific information services, which tend to limit themselves to journals and proceedings, technical reports, and sometimes monographs, the material that lends itself to routine processes. Yet those more elusive forms of scholarly presentation have become sensitive instruments, when put at the disposal of the scientific community. Its members often choose these channels to transmit their germinal ideas, their scientific philosophy and theoretical probings, their standards, judgments, and concerns, their wisdom as elder statesmen, in short, the currents of scientific thought and scholarship which give meaning and direction to the minutiae of research and compensate for the narrowing confines imposed by specialization.

In order to develop a concept of scientific literature for our time, we may have to reinterpret a type of publication which serves only the purpose of providing scientific information. This "scientific journalism" spreads as much scientific knowledge as can be reasonably absorbed and digested through the self-organizing audiences reached by the individual journals; it therefore calls into service a large number of scientists with varying editorial responsibilities who see to it that the dissemination of knowledge remains authentic and stimulating, qualities sometimes diluted or lost in abstracting and index-

ing. With the spread of scientific literacy, the number of authors and readers of scientific writings has been vastly enlarged. Scientific journalism affords an outlet for communications on scientific subjects, which are not necessarily contributions to scientific knowledge. At the same time, this form of publication generates a continued discussion, often followed by republication, of outstanding contributions, which will eventually find their way into scientific literature. As a reservoir of scientific information that can be of significance to the nonspecialist and the lay public, scientific journalism is also linked with journalism in general through the work of professional science writers.

In a positive way, the literature of science can crystallize only after a scholarly criticism of scientific writings has fully emerged. One task of such criticism is to clarify what each form of scientific presentation can contribute to the body of literature as a whole; another, to analyze the intrinsic rules imposed upon the literature by the nature of scientific inquiry in various areas of science. Most important is the scientist's responsibility, in his capacity as critic, to recognize and select from the flow of publications those works that meet the highest standards.

A beginning toward organized criticism in science was made in the annual reviews and review articles. Now scientific book reviews, often discredited in the older disciplines, appear to be gaining. In multidisciplinary areas in particular, book reviews which throw light upon a work from the various interlocking fields can point the way from an indiscriminate mass of scientific writings to scientific literature. When critical judgments are pooled and receive bibliographic recognition over a sustained period, it becomes apparent that such collective criticism tends to sift and to lift out the works that are substantial, articulate, and mature. This process can shorten the time needed for a selection of contemporary scientific

literature. Just as, in the words of Joseph de Maistre, "Chaque nation est pour l'autre une postérité contemporaine,"<sup>15</sup> so can each related discipline be a discerning critic for another. Once established, criticism in science should find its own form of expression. It can then make scientific literature, as R. A. Scott-James put it for the relation of literary criticism to literature in general, "self-conscious about itself, about its own processes, its technique, its aim."<sup>16</sup>

In the February 1963 issue of *The Rockefeller Institute Review*, John Maddox has raised the crucial question: "Is the Literature Worth Keeping?"<sup>17</sup> We believe that what deserves to be called literature in science is worth keeping, but we need not look for it in the machines that may eventually assist us in recording it. A chiefly technological approach has been promoted for about twenty years

<sup>15</sup> Louis Paul Betz, *Studien zur vergleichenden Literaturgeschichte der neueren Zeit* (Frankfurt a. M.: Rütten & Loening, 1902), p. 13.

<sup>16</sup> *Op. cit.*, p. 14.

<sup>17</sup> "Is the Literature Worth Keeping?" *Rockefeller Institute Review*, I (1963), 9-14; an abridged version appears in *Bulletin of the Atomic Scientists*, XIX (November 1963), 14-16.

now, and yet the "crisis in scientific information" has been aggravated rather than relieved. Underlying this crisis is the lingering use of a concept of scientific literature which was new at the turn of the century. It was a misunderstanding to apply this concept directly to the bibliography of twentieth-century science by merely trying to list *all current publications in a given field*.

The time has come to cultivate a concern over the *evolving contemporary scientific literature*, and to develop adequate bibliographic methods through a scholarly approach. This need not be done in an atmosphere of crisis. By taking the longer view of the historian, the humanist, and the librarian, we can see even now that some problems of scientific information storage and retrieval seem to defy solution because they do not need one. For information that does not contribute to scientific knowledge is not worth retrieving, and the only indestructible way of storing scientific knowledge is by allowing it to become scientific literature, and by helping it to become so recognized and known. ■ ■

## Winchell, Walford, or Malclès?

(Continued from page 26)

Its index would be thorough and its format similar to that now used by Winchell, if this would be possible under required printing methods.

Wilson's *Reader's Guide to Periodical Literature* is now available in the regular edition and also in an abridged edition for small libraries. Perhaps a similar arrangement could be developed for a guide to reference sources. This could be on a three-step basis: (1) an "international"

edition of broad scope for large public and university libraries; (2) a small edition primarily national in scope, for smaller public libraries; and (3) a middle edition for the medium-sized libraries.

A full-time organization would probably be necessary to handle a production of this scope. However, the gap around existing reference guides widens each year. A practical tool must be developed to fill this gap. ■ ■



# The Harry S. Truman Library as a Center for Research on the American Presidency

BY PHILIP D. LAGERQUIST

WHEN George Washington, having turned over the presidential office to John Adams, left Philadelphia on March 9, 1797, to travel, as he put it, "through mud and mire to reach more tranquil scenes at Mount Vernon"<sup>1</sup> he took with him, along with his other chattels, the files he had accumulated during eight years' service as chief executive, thus setting a precedent which was to be followed by each of his successors. In so doing the Father of his Country did nothing improper or illegal. The presidency is unique in that, with the exception of the vice-presidency, it is the only office in the executive branch of the government to have been created by the Constitution and not by statute. For this reason presidential papers have a privileged status. They are confidential files, intimately involved in the presidential decision-making process. To consider them part of the official public record would run counter to the concept of a government based on a separation of powers, which lies at the very heart of the American Constitution. The validity of this thesis is attested by the fact that the right of an outgoing president to take his files with him has never been successfully challenged in the courts.

The shipment of Washington's papers from Philadelphia to Mount Vernon re-

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quired the use of only a few trunks, cartons, boxes, and the like, even though these documents represented the record of executive action during nearly a decade. Over the years, however, with the growth of the republic in area and in population, with the development of modern means of communication, especially the typewriter, with the increased literacy of the electorate, and with the increase in the size and responsibilities of the presidential office year after year, the number of individual items in collections of presidential papers has multiplied until, in the case of our modern-day chief executives they are numbered in the millions. While such documents are legally the president's property, they are, nevertheless, files in which the entire nation has a vested interest, for they are the only record we possess of the daily actions and decisions of our chief executive and as such are an invaluable and irreplaceable source of information for scholars investigating the history of our country. It is unfortunate, therefore, that the papers of many of our presidents have been willfully or accidentally destroyed or are in depositories scattered from one end of the country to the other. The Library of Congress, our greatest manuscript-holding institution, has, at present, twenty-three collections of presidential papers, sixteen of these being

<sup>1</sup> Letter from George Washington to Matthias Slough, Feb. 6, 1797, *The Writings of George Washington From the Original Manuscript Sources, 1745-1799*, ed. John C. Fitzpatrick (89 vols.; Washington: U.S. Government Printing Office, 1940), XXXV, p. 385.

of a substantial nature. The number of manuscripts in even the largest collections of presidential papers in the Library of Congress, however, is relatively small when compared with those of our most recent presidents. The largest of the library's collections, the Taft papers, comprises approximately half a million items. In contrast, the Truman papers consist of well over five million pages, while the Franklin D. Roosevelt collection is even larger. The processing and servicing of collections of this size so that they can be made available to researchers is a job of considerable magnitude, which, under ideal conditions, calls for a trained staff which can devote its full attention to work on the collection. There was a time, long past, when a president could hope upon retirement to arrange his papers himself. Washington, several years after leaving office, wrote a friend that he was devoting his leisure hours to "the arrangement and overhaul of my voluminous Public Papers, Civil and Military, that they may go into secure deposits, and hereafter, into hands that may be able to separate [*sic*] the grain from the chaff."<sup>2</sup> Our modern-day presidents, however, have neither the time nor the staff assistance to undertake such a task, considering the magnitude and scope of their files. This is a job which can be successfully undertaken only by persons experienced in the care of archival collections.

Moreover, in addition to their papers, our presidents also take with them when they leave the White House the many books and gifts presented to them during their terms of office, and provision must also be made for the disposition of these items. While in the past the papers, books, and mementos of former presidents have often been divided among a number of institutions for safekeeping, our most recent presidents have adopted the concept of the individual presidential library, relating to a single administration,

as the best method of preserving for future generations the interrelated historical materials pertaining to each administration. The archetype of the present-day presidential library is the Hayes Memorial library and museum, at Fremont, Ohio. The Hayes library, which was opened on May 30, 1916, was built to house the papers and memorabilia of President Rutherford B. Hayes. Erected by the state of Ohio, it is maintained and operated under the joint supervision of the state and the Hayes Foundation. It was followed by the Franklin D. Roosevelt library which was opened to the public in 1941, the first such institution to be operated by the federal government. With the passage by Congress of the Presidential Libraries Act of 1955, permanent provision was made by Congress for the housing and care of the papers, books, and gifts of any president who wished to present them to the nation. Under the provisions of this Act the papers and other historical materials of presidents Herbert Hoover, Harry S. Truman, and Dwight D. Eisenhower are now deposited in libraries bearing their name, and a Kennedy library is now in the planning stage. Each of these libraries is staffed and operated by the National Archives and Records Service of the General Services Administration, and they are thus a part of the government's nationwide record-keeping system.

Many consider Harry S. Truman the most history-minded of our recent presidents, and so it is perhaps fitting that the first institution to be established under permanent presidential library legislation was built to house his papers. In his *Memoirs* Mr. Truman states that "the one great external influence which, more than anything else, nourished and sustained [my] interest in government and public service was the endless reading of history which I began as a boy and which I have kept up ever since."<sup>3</sup> Conscious of his

<sup>2</sup> *Ibid.*, Letter from George Washington to the Secretary of War, July 29, 1798, XXXVI, pp. 373-74.

<sup>3</sup> Harry S. Truman, *Memoirs*, Vol. I: *Year of Decisions* (New York: Doubleday and Co., 1955), p. 119.

own debt to history and to the historical profession, Mr. Truman was particularly concerned about the ultimate disposition of his own papers after his departure from the White House. After much cogitation and consultation with friends and members of the White House staff, he decided to follow the precedent set by Franklin D. Roosevelt, and turn over his files to the custody of the federal government, to be housed in a building erected for that purpose in Independence, Missouri, the town where he had lived the greater part of his life. The building was to be built with money raised by private subscription, and for this purpose a non-profit corporation was formed. An intensive drive for building funds, begun in 1953 shortly after Mr. Truman's departure from the White House, resulted in contributions from more than seventeen thousand individuals and organizations, and by the time the building was completed the goal of \$1,750,000 had been surpassed.

The Truman library was formally dedicated on July 6, 1957, by Chief Justice Earl Warren in the presence of dignitaries representing both major political parties and including former President Herbert Hoover, Mrs. Franklin D. Roosevelt, former Secretary of State Dean Acheson, and several thousand other citizens. During the course of the ceremonies President Truman presented to Dr. Wayne C. Grover, Archivist of the United States, a document attesting the legal transfer to the nation of his papers and other historical materials "to the end that the people may have those things available for study and research and for their enjoyment and education."<sup>4</sup>

The new building, which by the former president's generous action had become the property of the nation, is a one-story structure of Indiana limestone. It is located in a tract of thirteen and two-tenths

acres about one mile from the center of Independence. Shaped roughly like the letter "J," the building is six hundred feet long and has a full basement. One end of the structure is devoted to a public museum. Here are displayed many gifts, valuable and otherwise, which were presented to Mr. Truman when he occupied the White House, as well as documents from the White House files chosen for their illustrative value. The main theme of the exhibits is the nature and history of the presidential office. While the exhibit items, with few exceptions, originally belonged to Mr. Truman, the exhibits, in accordance with the former president's wishes, are designed, not to glorify him, but to explain in meaningful terms the scope of our chief executive's manifold duties. Adjacent to the museum is an auditorium seating 250 persons which is used for showing films from the library's motion picture collection and for meetings of scholarly organizations interested in the library's activities. Here, also, members of the staff, and sometimes Mr. Truman himself, talk to groups of school children who come to tour the museum.

The central portion of the building contains the library's research facilities. In this area are the stacks; a central research room where scholars can examine the library's historical materials; staff offices; a microfilm reading room; and a photographic laboratory. While the entire building is air-conditioned, the stack areas have, in addition, special temperature and humidity controls for protection of the papers. The director of the library, Philip C. Brooks, supervises a staff of fifteen, including six professional archivists. Custodial and maintenance personnel are supplied by the General Services Administration's Public Buildings Service.

As far as the general public is concerned, the museum is the library's focal point of interest. The library, however, is first and foremost a research institution. Established as a depository for the White

<sup>4</sup>Letter from Harry S. Truman to Franklin F. Floete, Administrator, U.S. General Services Administration, Feb. 12, 1957.



House files of the Truman administration, the most important task of the library's staff is to make these materials available to responsible scholars. To this end the Truman papers have been removed from their original file cases, placed in lightweight archives boxes, arranged, listed, and shelved in appropriate order. In addition to the main body of White House papers, files transferred to the government by Mr. Truman include such ancillary materials as the records of the White House official reporter, the records of the White House social office, and the files of a number of the members of Mr. Truman's White House staff. Also included in Mr. Truman's gift were his senatorial papers, and the papers accumulated by him during his brief term as vice-president.

To supplement the Truman papers the library has for the past several years been attempting to acquire the papers of personal and political associates of Mr. Truman. To date more than fifty individuals have donated their personal papers to the library, and an equal number have made firm commitments to do so at some future date. The list includes former members of Mr. Truman's cabinet, other officials in the executive branch, members of the independent regulatory agencies, White House staff members, officials of the Democratic National Committee, members of Congress, and persons who were associated with Mr. Truman during the early years of his political career. In a further attempt to fill in gaps in the historical record, the library has recently initiated an oral history project. This involves the interviewing by trained members of the library's staff of persons who held key positions in the Truman administration or who enjoyed the confidence of Mr. Truman at various stages of his career. The interviews are recorded on tape and, after transcription, are made available to researchers.

The library also has an extensive collection of audio-visual materials relating

to Mr. Truman and the Truman administration, consisting of more than twenty thousand photographs, thirteen hundred sound recordings, and approximately twenty-two thousand and five hundred feet of motion picture film. The still picture collection has been used extensively, both by those looking for book illustrations and in connection with the preparation of documentary films. Motion pictures from the library's collection have been shown in the library's auditorium from time to time as part of its educational program, and the sound recordings of speeches have been in great demand, both by historians and by students wishing to study Mr. Truman's campaign techniques.

The library's book collection consists of approximately twenty-seven thousand books and twenty-nine thousand pamphlets and other printed items. At the time of the library's dedication the book collection comprised seven thousand items, mostly gifts to Mr. Truman while he was president. In order to increase the usefulness of the book collection as an adjunct to the library's manuscript materials, additional book purchases have for the most part been concentrated in the areas in which the library is specializing. In addition to anything published about Mr. Truman and his associates and about the Truman administration, the library is also purchasing, on a selective basis, books relating to the history and nature of the office of the presidency. These purchases include not only published items but also, when available, microfilm copies of presidential papers in other institutions, notably the Adams papers in the Massachusetts Historical Society and the Library of Congress collection of presidential papers.

Portions of the library's museum collection area are also used by researchers in connection with their work. One item frequently consulted is a large map showing the routes taken by Mr. Truman during the course of his 1948 whistle-stop

campaign, which at one time hung outside Mr. Truman's White House office and which is now one of the museum's most popular exhibits. Useful to scholars in another way is the museum's collection of more than eight hundred political cartoons. Most of these are originals, presented to Mr. Truman by the artists. They are much in demand for illustrative purposes.

While the director of the library has discretion in the matter, permission to use the library's historical materials is generally granted to persons whose study has a serious and useful purpose and who, preferably, have had previous experience in the use of manuscripts. No one, however, is given privileged access to the files. Those papers which, according to law or the wishes of the donor, must, for reasons of national security or personal propriety, be closed for the time being are closed to all researchers. Nearly one-half of those who have so far studied at the library have been candidates for the MA or PhD degrees, most of them working in the fields of history or political science. Other researchers at the library have been college professors pursuing advanced scholarly projects, and biographers, journalists, and freelance writers working on books or magazine and newspaper articles. Occasionally a senior honors student, when recommended by his advisor, will be allowed to examine the papers. Generally, however, the staff will suggest that college undergraduates as well as high school students use printed sources as more suitable for their purposes. Prospective researchers are encouraged to write the library in advance of their arrival regarding the nature of their research project so that the staff may ascertain what materials are available on the subject. If the library has nothing on a topic, an attempt is made to let the researcher know where information on the matter can be obtained. After coming to the library and before starting to work, the prospective researcher is interviewed

by the director and one of the staff archivists. This gives the staff a better knowledge of the topic to be investigated and gives the researcher an opportunity to learn in detail about the library's holdings.

Students utilizing the library's research facilities have come from all parts of the country. The subjects they have worked on run the range of research possibilities for the Truman period—from Bernard Baruch to Arthur Vandenberg, from anti-trust laws to the Taft-Hartley law, from agricultural policy to unification of the armed forces. Although the library has been open for research only since 1959, an impressive number of dissertations, theses, and books has already appeared based in large part on work done there. As scholarly interest in the Truman period increases and as more papers become available for study, it is anticipated that research interest in the library will grow correspondingly. To encourage such interest, a nonprofit corporation, the Harry S. Truman Library Institute for National and International Affairs, has been formed. The institute, whose members are persons prominent in the fields of education and national affairs, has as its purpose the support of the research activities of the library on a broad scale. Its special interest is a grant-in-aid program whereby monetary grants up to one thousand dollars may be allotted to worthy scholars, especially those who are just beginning their academic careers, for travel and living expenses while they are studying at the library.

In his book, *Mr. Citizen*, Mr. Truman, in speaking of his part in establishing the library, says: "Nothing that has happened to me during or since the presidency has given me such deep and abiding satisfaction."<sup>5</sup> The library staff has felt compensated for its many long hours of hard work by seeing the library develop into a full-fledged research institution. ■ ■

<sup>5</sup> Harry S. Truman, *Mr. Citizen* (New York: Bernard Geis Associates, c. 1960), p. 259.

# Cooperative Storage Warehouses

By HELEN JOANNE HARRAR

COOPERATIVE STORAGE WAREHOUSES have been suggested as a possible means by which large libraries may, with minimal expenditures, retain and even acquire infrequently used but potentially valuable research material. Three types of this facility exist in the United States today.

The first, exemplified by the New England Deposit Library (NEDL), is a central storage warehouse owned and operated by several participating libraries. Each member merely rents space in a jointly-owned building, determines how its space is to be used, and maintains its own collections. The second type, illustrated by the Hampshire Inter-Library Center (HILC), is a consolidated warehouse owned and supported by a group of co-operating libraries. Each member contributes its little-used serials to the warehouse, which completely integrates the resulting collection. Contributed funds and income from the disposition of duplicates provide for a limited acquisitions program of rarely-consulted serials and expensive sets.

The third type, illustrated by the Midwest Inter-Library Center (MILC), is distinguished from the preceding two types by the scope of its operations and holdings. Materials deposited by members are absorbed into the collections when deposit limitations permit, and duplicates are discarded. Unlike the others, this type has a professional staff which operates library programs approved by the membership and which carries on an acquisitions program designed to supplement members' collections as well as to strengthen library resources in the region. A range of services is provided for the membership and, under certain conditions, for nonmembers as well.

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All three types are primarily concerned with little-used materials. The meaning of this term, however, varies from warehouse to warehouse and from member to member, depending upon the exigencies of the moment and the nature of various institutional needs.

The programs of all three have been established upon certain basic assumptions: (1) cooperative storage warehouses provide more economical storage than could be achieved if each member housed the same materials within its own main building and branches; (2) the materials stored receive little use and therefore generate low service costs; (3) cooperative storage warehouses reduce costs even though they necessitate duplication of records and impose additional costs in transporting materials between the warehouses and the requesting libraries; (4) delays in provision of desired material are unimportant as compared with savings in costs; (5) cooperative storage warehouses increase the research resources available to the cooperating libraries.

The purpose of this study is to determine the effectiveness of each of these types of warehouses and to recommend



optimum measures for storage of little-used materials.

#### BACKGROUNDS OF THE THREE WAREHOUSES

The New England Deposit Library program was initiated by Harvard University during the late 1930's. Recalling an earlier storage enterprise proposed by Harvard President Charles W. Eliot, Keyes D. Metcalf suggested that the space dilemma might be solved through an off-campus, low-cost, low-upkeep area in which rarely-used volumes could be stored compactly. To help support the capital investment such a structure would require, Metcalf envisioned a jointly-owned and operated storage warehouse. Incorporation of the NEDL was sanctioned by the state legislature in 1941, and early in 1942 a specially-erected building was opened.

Metcalf hoped that the NEDL would permit elimination of existing and future duplication among members, help to bring about an acquisitions program dividing subject responsibility among them, and allow ready accessibility to all members of the little-used items of any one.<sup>1</sup> His main purpose, however, was provision of low-cost storage.

Discussion of what was to become the Midwest Inter-Library Center began in the early 1930's. In a report prepared by Metcalf and John Fall, a jointly-operated storage library was advocated because it would reduce or delay the need for new library buildings, thereby permitting accumulation of cash reserves which could be directed to other needs. It would speed service and eliminate "unjustified wastes" in distances traveled to obtain materials, and allow high-density storage of books at a lower storage cost per volume than would be possible in the conventional library building. Too, it would spur such cooperative efforts as the elimination of unnecessary duplication among deposited

materials, as well as cooperative acquisition of little-used items.<sup>2</sup>

In his 1948 survey, Errett W. McDiarmid recommended that the Middle West provide for regional research demands so as to achieve efficient, economical use of present and future resources. The advantages claimed for the cooperative programs he cited were those previously named as well as more intelligent planning of the types of research and graduate programs to be offered.<sup>3</sup>

In 1949 ten research libraries formed the Midwest Inter-Library Corporation, the main purpose of which was the establishment of a center to organize, house, service, and under certain conditions to own, infrequently used research materials. Secondary purposes were the encouragement of coordination of collecting policies in specialized fields and the exploration of possible cooperative bibliographical services.

The Hampshire Inter-Library Center was the result of long-term cooperation among three western Massachusetts colleges, whose librarians had simplified inter-library loan policies, jointly purchased expensive items required by more than one school, and attempted to prevent unnecessary duplication of expensive works through consultation and placement of such items on the campus where most needed. A storage library was seen as the answer to future growth problems, since it might release shelf space in member libraries for current materials, help offset the effects on library budgets of spiraling book and serials costs, and help increase combined research resources.<sup>4</sup> Incorporated in 1951, HILC was to be devoted primarily to serials. By combining duplicate volumes of journals no long-

<sup>2</sup> John Fall and Keyes D. Metcalf, *A Proposal for a Middle West Deposit Library* (Chicago, 1940). 94p. Mimeo.

<sup>3</sup> Errett W. McDiarmid, *A Midwest Inter-Library Center* (Chicago, 1948). 52p. Mimeo.

<sup>4</sup> Keyes D. Metcalf, *The Hampshire Inter-Library Center: A Survey of Its Background and Its Problems With Recommendations for the Future* (South Hadley: The Center, 1957). 31p.

<sup>1</sup> Keyes D. Metcalf, "The New England Deposit Library," *Library Quarterly*, XII (July 1942), 628.

er published and of specialized titles not frequently requested, sufficient savings would, hopefully, be realized to permit purchase of additional materials and to "increase the library resources available to each member without requiring each to increase its library expenditures correspondingly."

#### COMPOSITION OF MEMBERSHIP

By the end of 1960, the NEDL had eleven members—five colleges and universities, one public library, four special libraries, and the state library—all of which were located in or near metropolitan Boston. MILC then had twenty members, eighteen of which were universities. In contrast to the NEDL, members were located from a few blocks to several hundred miles from the center itself.

At the same time, HILC had four members—the original three colleges plus the state university. The four institutions were geographically isolated from large research collections, but near each other, no member being more than twelve miles from the other three.

#### OWNERSHIP OF MATERIAL

Deposits in the NEDL have never, as originally hoped, become its property; neither have the collections been integrated nor duplicates eliminated. MILC has four deposit categories, ranging from transfer of title to the center through provisions for temporary storage by any member library. Reserving the right to reject offered items, MILC generally accepts material if it is not widely held among the membership, has research value within the region, and is little used. While the deposit criteria were broadly interpreted in earlier years, limitations were more rigidly enforced as shelving space diminished. A two-year moratorium on deposits was declared in 1960 so that the backlog of unprocessed deposits might be eliminated. All materials housed in HILC become its property at the time of deposit.

The owning library can, at any time, permanently recall material from the NEDL. Under certain conditions, the depositing library can permanently recall material from MILC, although deposit in categories which permit return is discouraged. Material in HILC is the property of the center; none can be returned to the original owner.

#### SHELVING OF MATERIAL

At the NEDL some members shelve by subject classification and some by the size classification of nine categories devised by Harvard. At MILC a size classification having six classes is used for miscellaneous monographs and serials; other materials are shelved according to self-arranging characteristics. HILC uses a size classification of six categories for the major portion of its holdings.

#### INPUT OF MATERIALS BY MEMBERS

At the NEDL each member shelves its own deposits and supports the related costs. The custodian handles only Harvard deposits. A union catalog of holdings was anticipated but has never been created. Aside from an author catalog for Harvard, Radcliffe, and Tufts holdings, and a shelf list of Boston Public library deposits, the NEDL staff has no precise knowledge of what and how much has been deposited. Harvard appears to be the heaviest depositor, but since 1948, when its NEDL space was filled, Harvard has housed additional storage volumes on campus. The Boston Museum of Science, the Massachusetts State Library, and Radcliffe College are the only other current depositors. Their current deposits are infrequent and of no appreciable volume.

MILC members select materials for deposit, within the specified criteria, and pay all costs connected with processing these items for transfer. The center pays all other costs for all deposit categories except temporary storage. Member records dealing with the amount of material de-

posited are generally informal; MILC's records are precise only for cataloged serials and monographs, which constitute about 10 per cent of the collection. Deposits are less frequent and much smaller than in earlier years. Eight of the twenty members sent varying quantities of material to the center in 1960. According to reports of member librarians, input has dropped for various reasons: early weeding and depositing relieved space needs in member institutions; the 1960 moratorium declared on deposits forcibly slowed the deposits program. The heaviest and most consistent depositor has remained the University of Chicago.

All material placed in HILC, regardless of the mode of acquisition, requires approval of all four members. There is no accurate count of volumes deposited. As of the end of 1960, the University of Massachusetts had deposited least while Mount Holyoke College had deposited most.

Heavy and frequent deposits were made in all three warehouses during the early years of operation. After the initial influx, deposits usually dropped. The heaviest depositors in each instance have been those members closest to each storage facility.

#### USE OF STORED MATERIALS

The number of items borrowed in any given year from the NEDL is not known, since the facility keeps records only for Harvard, Radcliffe, and the Boston Public library. Records kept by the remaining members, who retrieve their own materials, are informal. Based on the members' estimates, approximately 6350 volumes were borrowed in 1960, of which 62 per cent went to Harvard.

MILC and HILC keep records of all items requested. In 1959-60 MILC lent 1861 volumes; HILC, 1410. The Chicago area members accounted for almost 50 per cent of the total loans of MILC. The University of Chicago borrowed 23 per

cent of the total; John Crerar library, 22 per cent. In the same year HILC provided 28 per cent of its total loans for Mount Holyoke.

For the same period, in-person users of the NEDL numbered 152; of MILC, 198; of HILC, 117. Harvard and Radcliffe together accounted for 67 per cent of on-site NEDL use. The University of Chicago provided 42 per cent of the in-person use at MILC, while Mount Holyoke provided 74 per cent of such use at HILC.

NEDL offers no reference service. MILC verifies bibliographical citations and locates factual information. During 1959-60 the service was performed 166 times, 15 per cent of the total being for the John Crerar library and 13 per cent for the University of Chicago. During this year HILC answered six such questions, of which four were for Smith College.

For all three warehouses, two of the three forms of service (*i.e.*, retrieval, in-person use, and reference service) were most heavily used by the member closest to the center. At the NEDL, Harvard proved the heaviest user of all three services.

#### AVAILABLE SPACE IN STORAGE BUILDINGS

While less than 5 per cent of the total NEDL stack space remained unused at the end of 1960, there were no immediate plans to add another stack unit. At the same time, MILC still had available 5 to 10 per cent of its shelf space. The need for another unit was then being discussed only generally. HILC, having moved into new quarters that year, had used only some 35 per cent of its total stack space.

#### COSTS OF STORAGE BUILDINGS, GROUNDS AND OPERATIONS

The New England Deposit Library was erected in 1942 upon a 50,000 square foot plot donated by Harvard. The final cost of the building, including land-



	NEDL	MILC	HILC
Stated cost	\$13,621.19	\$105,504.89	\$19,728.95
Depreciation @ 2%	4,300.00	7,320.59	4,048.37
Loss of interest @ 4%	8,600.00	34,641.18	8,096.74
Real cost	\$26,521.19	\$147,466.66	\$31,874.06

scaping, shelving, and equipment, was \$223,939. The Midwest Inter-Library Center was erected in 1950-51 at a cost of \$866,029.43 upon a 41,860 square foot plot donated by the University of Chicago. The Hampshire Inter-Library Center has always been housed in space belonging to a member. The estimated cost of the area occupied by the center in its present location, an addition to the University of Massachusetts library, was \$202,418.40, not including land costs.

To determine the operating costs of each warehouse, the average annual expenditures over 1955-60 were derived from yearly financial statements provided by each center. To the stated averages were added two costs: building depreciation at 2 per cent per year, and loss of interest on money invested in the building at 4 per cent per year.

The stated operating costs, as compared to the real costs, for each warehouse are shown above.

#### CONCLUSIONS

From the foregoing the validity of claims for the three cooperative storage warehouses can be determined. A major argument, first cited by President Eliot, has been that warehouses would eliminate the need to hold expensive pieces of land for addition to main library buildings. This no longer holds, because of the development of department libraries which make materials more accessible to the publics most likely to use them. Harvard, with its more than ninety service units, exemplifies the trend. Even with the existence of the NEDL, it has built additional conventional library units on

its own campus. Furthermore, to say that construction on inexpensive land is more economical than on expensive land overlooks the fact that land does not depreciate. The purchase of land is merely a conversion of capital from one form to another.

A second argument, that costly enlargements would no longer be necessary, overlooks the fact that expansion of the collection is accompanied by increased staff and readers.

The argument that maintenance of a storage collection would be less costly than maintenance of an "active library" compares dissimilar units. At the NEDL, maintenance of closed stacks, where heat and lighting are reduced, has been proved less expensive than that for an open stack which requires constant upkeep and normal lighting and heating conditions. There is no reason, however, that part of the stacks in any building could not be closed to the public, serviced only as necessary, and maintained with reduced heat and light. Under these circumstances, storage costs would be comparable for the two units.

Frequently overlooked is the fact that bibliographical control is as important for a stored collection as for an open one—perhaps more so, since browsing is automatically eliminated. If stored material is to be controlled, such items must appear in at least the public card catalog or an equivalent. Storage does not, as has been suggested, reduce the size of the catalog. It may, in fact, multiply records for items stored, if those items are to be accessible.

When the NEDL was created, its value

for compact storage was stressed. Since only four members use size classifications, this value has not been realized. Metcalf stated that one of the major economies offered by the NEDL lay in decreased processing costs. Earlier, when Harvard processed 20-25 per cent of its acquisitions directly for storage, a substantial saving was realized. With the elimination of that procedure some years ago, the additional costs of weeding and deprocessing increased total handling costs. What has not been considered is the fact that inexpensive processing expenditures need not be limited to warehouses. If a library were to use the same partial or simplified cataloging for its on-campus storage collections, cost should be identical with that for off-campus storage. It may be concluded that the economies provided by a storage warehouse could be achieved by any library if the same techniques (*i.e.*, compact storage, inexpensive maintenance, and simplified processing) were used on campus.

The Fall-Metcalf survey indicated that a warehouse would permit accumulation of cash reserves to be used for other purposes and would allow advantages resulting from cooperation. Tax-supported institutions, however, have no reserves since their funds are paid out as needed by the supporting taxing bodies. Too, nonprofit educational institutions do not actually build up cash reserves.

Finally, several MILC members have added storage units on their own campuses, regardless of the center's existence, thereby expending funds which, if the argument were legitimate, could have been diverted to other purposes.

Cooperative acquisition through MILC has resulted, but cooperative cataloging, another possible advantage cited by Fall and Metcalf, has not. Cooperative acquisition, elimination of duplication, and liberalized loan privileges could be carried on by a group of participating institutions without the presence of the stor-

age warehouse, as was actually done by the HILC group before the Hampshire Center was established.

Storage in MILC, as in the NEDL, cannot have produced the originally anticipated low cost per volume stored, since the capacity of the center will not, under present conditions, reach the predicted ceiling. Only 10 per cent of the materials are stored by size; much of the remainder is shelved so as to take up at least as much space as would conventional storage.

To date there has been no evidence that MILC has contributed to consideration of types of research programs, to the development or utilization of faculty skills, or to specialization in acquisition and in graduate work, either by individual institutions or by the membership as a whole, as predicted by McDiarmid.

Another argument for the center was that it would reduce the number of staff needed to handle active materials in member libraries, and would decrease the total staff time in the region by reducing duplication of effort. It is obvious, however, that the same results would be achieved by handling material on campus in exactly the same way as in the warehouse.

It was hoped that HILC would be able to save money and still increase total regional resources while promoting institutional cooperation, but there is no evidence that savings have been made. The argument that the center will increase regional resources lacks merit in view of the extensive resources of the Boston area less than one hundred miles away. The members of HILC worked together long before the center's inception, and the schools have maintained other cooperative programs that were independent of HILC.

Storage costs per volume drops as the density of storage increases. It should be possible for individual libraries to convert portions of existing stack space or

to construct new units employing compact storage and thereby achieve the same economies attributed to the cooperative storage warehouse which uses these same storage methods.

Underlying the concept of cooperative storage warehouses are two important points; one, that such warehouses store little-used but nonetheless valuable research material, and two, that such warehouses promote among libraries cooperation which is highly desirable. It should be reemphasized that the frequency of use does not determine an item's research value. At the same time, caution must be exercised to assure that infrequently-used material of no value is not retained, thereby increasing the costs of handling and maintenance regardless of the system employed.

Secondly, cooperation among institutions is certainly useful, if not essential. Yet cooperative storage facilities are not the only form of cooperation presently available, as arguments favoring these facilities might imply. For example, an important cooperative mechanism which is carried out independently of any warehouse, but which extends the resources of research libraries throughout the nation, is the Farmington Plan.

The three centers discussed here show that cooperation can be achieved in concrete form. The next step is the development of more efficient cooperative methods, which improve regional resources and access to materials without the duplication of processing effort and the extra costs involved in cooperative storage. ■■

## Association of Southeastern Research Libraries

THE Association of Southeastern Research Libraries was convened on Wednesday, November 6, 1963, in the new Auburn University library, Auburn, Alabama. Almost all member libraries were represented, and Chairman W. Porter Kellam (Ga.) presided.

Discussion centered on cooperative activities among the member institutions. Several specific projects were reported upon, including:

1. A joint program for the acquisition of retrospective newspaper files on microfilm, being coordinated by Olive Branch (Tenn.).
2. A project for the cooperative acquisition of retrospective serial desiderata, being administered by David Kaser (Joint University Libraries).
3. A survey of strengths and weaknesses in the holdings of member libraries, being conducted by Stanley West (Florida).

The above projects will continue.

The need was recognized for the standardization of interlibrary loan practices and of photocopying activities as they applied to interlibrary loans in the southeastern region. T. N. McMullin (LSU) will survey existing practices in a first effort to attain some level of uniform activity.

There was discussion of appropriate regional document depositories in the Southeast under the new United States depository law.

Refreshments were served, and, after deciding to meet next in Norfolk, Va. in October 1964, the meeting was adjourned.—D.K. ■■



# Selected Reference Books of 1962-1963

By EUGENE P. SHEEHY

## INTRODUCTION

THIS ARTICLE continues the semiannual series<sup>1</sup> originally edited by Constance M. Winchell. Though it appears under a by-line the list is actually a project of the reference department of the Columbia University libraries, and notes are signed with the initials of individual staff members.<sup>2</sup>

Since the purpose of the list is to present a selection of recent scholarly and foreign works of interest to reference workers in university libraries it does not pretend to be either well balanced or comprehensive. Code numbers (such as A11, 1A26, 2S22) have been used to refer to titles in the *Guide*<sup>3</sup> and its supplements.

## GUIDES

Maichel, Karol. *Guide to Russian Reference Books*. Edited by J. S. G. Simmons. Stanford, Calif.: Hoover Institution, 1962- . v.1- . (Stanford University. Hoover Institution on War, Revolution and Peace. Bibliographical ser., no.10) v.1, \$5.

This first volume brings together from Russian and other sources 379 items of general bibliography and related reference materials, arranged and annotated as a guide, with broad chronological coverage. Subject bibliography is reserved for sections to be published later. Although generally well edited, there are errors such as the omission of title page information, failure to cite

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latest edition, incorrect periodicity, etc. Because the work will be valuable to larger libraries and to specialists, it is hoped that editorial standards can be maintained and, where needed, improved.—E.B.

Malclès, Louise-Noëlle. *Manuel de bibliographie*. Paris: Presses Universitaires de France, 1963. 328p. 32 fr.

A new work, not merely a new edition of the author's *Cours de bibliographie* . . . , 1954 (*Supplement* 2A4), this will nonetheless largely supplant the earlier title. In approach it is less specifically designed as a textbook than its predecessor, but the content is of the same general nature, although considerably rearranged. Titles and editions appearing since 1954 are, of course, duly noted, as applicable. Thus the work can serve as an updated abridgement of the author's four-volume major work, *Les sources du travail bibliographique* (*Supplement* 1A101, etc.) for the small library or the individual not needing, or not prepared to pay for the larger set.—J.N.W.

Musiker, Reuben. *Guide to South African Reference Books*. 3d rev. ed. Grahams-town: Rhodes University Library, 1963. 161l. mimeographed. R1.25.

Earlier editions of this annotated bibliography, patterned on Winchell's *Guide*, were not widely distributed. This new revision lists five hundred of "the more important reference books on South African topics" (Introd.) published, with few exceptions, in the Republic of South Africa. Most are English language books, for the work does not pretend to comprehensiveness for

<sup>1</sup> CRL, January and July issues starting January 1952.

<sup>2</sup> Evelyn Allen, Eizenija Bergman, Eleanor Buist, Rita Keckeissen, Elizabeth J. Rumics, Susan Thompson, John Neal Waddell.

<sup>3</sup> Constance M. Winchell, *Guide to Reference Books* (7th ed.; Chicago: ALA, 1951); *Supplement* (Chicago: ALA, 1954); *Second Supplement* (Chicago: ALA, 1956); *Third Supplement* (Chicago: ALA, 1960); *Fourth Supplement* (Chicago: ALA, 1963).

Afrikaans sources. Where no standard reference work for a South African subject exists, general books of the handbook type have been substituted. Materials are arranged in nineteen wide subject categories according to Dewey classes with appropriate subdivisions. Within each section, works are listed alphabetically by author. Entries are numbered serially throughout. An index of authors, titles and some subjects is appended.—R.K.

Neiswender, Rosemary. *Guide to Russian Reference and Language Aids*. New York: Special Libraries Association, 1962. 92p. (S.L.A. Bibliography, no.4) \$4.

There are 221 well-annotated entries for works of reference in this practical manual which emphasizes publications since World War II. The listing and evaluation of 87 language textbooks and readers, as well as language records, is a unique feature. Other chapters include dictionaries and glossaries, encyclopedias, geographical reference works, bibliographies, indexes, translation digests and current biographical aids. Appendixes contain a comparative table of seven transliteration systems, a list of retail sources of Russian publications, and a glossary of Russian bibliographic and book trade terminology. The work will be useful in a wide range of libraries and to many individual students and research workers utilizing Russian materials in any field.—E.B.

#### BIBLIOGRAPHY

Ferguson, John Alexander. *Bibliography of Australia*. Sydney and London: Angus and Robertson, 1941- . v.1- .

Contents: v.5, 1851-1900, A-G. 1146p.

Although this volume represents a continuation of an established bibliography (*Guide* V153, *Supplement* 1V35), the changes in scope and arrangement make a note on this new phase desirable. The earlier volumes attempted to include all printed matter relating to Australia, wherever published, for the period 1784-1850; the volumes for 1851-1900 will be devoted to printed books, pamphlets, and broadsides, with several important categories excluded, e.g., belles-lettres covered by the Miller and

Macartney bibliographies (*Guide* R254, *Supplement* 3R49), parliamentary and other government papers, periodicals, elementary school books, and technical treatises. The chronological arrangement of the earlier volumes has been abandoned in favor of an alphabetical listing by main entry; locations in selected libraries continue to be included. Two further volumes are scheduled, the final one (v.7 of the set) to include a subject index and addenda.—E.S.

#### LIBRARIES

Collins, Robert and Duignan, Peter. *Americans in Africa; a Preliminary Guide to American Missionary Archives and Library Manuscript Collections on Africa*. Stanford, Calif.: Hoover Institution, 1963. 96p. (Stanford Univ. Hoover Institution on War, Revolution and Peace. Bibliographical ser., no.12) \$2.

The editors stress that this is only a preliminary survey of United States library resources on American activity in Africa. As such the information is not exhaustive, but serves merely to point out possibly useful collections. The guide is in two principal parts, "Missionary Archives" and "Library Manuscript Collections," each listing institutions and briefly describing their holdings. There are two appendixes, one giving the names of "American Missionary Sending Societies" grouped by religious denomination, the other providing a geographical grouping of the archives according to the African area served.—E.A.

*Directory of Special Libraries and Information Centers*. Anthony T. Kruzas, ed. Detroit: Gale Research Co., 1963. 767p. \$25.

In this alphabetic listing of ten thousand United States and Canadian institutions, there is given for each the address, telephone, staff, subjects covered, holdings, services, publications, etc. There are nine appendixes of types of libraries (e.g., United States regional libraries for the blind; libraries with United States patent files) and a subject index. Format resembles that of the publisher's *Encyclopedia of American Associations* (*Supplement* 3C4) and is easy to use, but the volume is considerably bulkier and

more expensive than Ash, *Subject Collections* (Supplement 3B13); this somewhat overlaps the latter but does not duplicate it, includes many libraries not in Ash (and vice versa), and is, of course, more recent.—E.J.R.

U.S. Library of Congress. African Section. *African Libraries, Book Production, and Archives; a List of References*. Compiled by Helen F. Conover. Washington: 1962. 64p. 60c.

Everything African being of paramount interest at present, this publication is a welcome one. It is a selective index of 341 items, which aims to provide a basic reading list for the three topics mentioned in the title. They are given separate treatment, with regional breakdowns for the first and third. Emphasis is on newly emerging Africa, the white South and the Arab North being largely excluded. Bibliographical citations are complete; library locations are indicated; and there are many useful annotations. There is an author index, but none by subject. This should prove valuable to virtually all libraries and many other organizations concerned with Africa.—S.T.

#### ENCYCLOPEDIA

*The Columbia Encyclopedia*. 3d ed., edited by William Bridgwater and Seymour Kurtz. New York: Columbia University Press, 1963. 2388p. \$49.50.

For second ed., 1950 and its illustrated supplement, 1956, see *Guide D7* and *Supplement 3D1*.

In the present work the editors have wisely chosen to maintain the same general scope and treatment established in the earlier editions, widely esteemed by librarians and laymen. All articles from the last edition have been examined for possible revision, and spot checking indicates that a large percentage of those not needing major changes have received suitable minor revisions in text and in bibliography. The real reason for the new edition is, however, not the need for such routine editing, but the inclusion of new articles and the insertion of major changes and updated information to incorporate the significant events of the past thirteen years. Again, the work seems well done, especially so in political and social affairs. Inevitably, the inclusion of a

large number of biographical sketches of living persons offers problems of selection and relative importance, and although it is easy to question many individual choices, the over-all judgment seems sound. The black and white illustrations first appearing in the 1956 supplement are presumably now a permanent feature, as are a number of newly introduced maps.—J.N.W.

#### PERIODICAL INDEX

*British Humanities Index*. [Annual cumulation] v.1- . 1962- . London: Library Association, 1963.

With the appearance of the first annual cumulation of this title, it is a pleasure to call attention to a feature not included in the quarterly issues of the index, and not anticipated in an earlier (January 1963) note in these pages. The second part of the cumulated volume is designated "Author Section," and provides an author approach (with full citations) to the signed articles. This will prove a welcome aid in various kinds of bibliographic searching.—E.S.

#### DIRECTORY

*Trade Associations and Professional Bodies of the United Kingdom; a Directory and Classified Index*. Compiled by Patricia Millard. London: C.B.D. Research Ltd., 1962. 128p. 30s.

This list of almost nineteen hundred national associations of the United Kingdom is designed "to provide a ready means of finding the address and telephone number" of such organizations and "to identify the associations concerned with any specific field of activity" (Introd.). Part I is an alphabetical listing of associations with address and telephone number; Part II is a classified index. Although the introduction states that "explanatory notes . . . had to be limited to the briefest minimum" in this first edition, no annotations at all appear. Future editions are planned.—R.K.

#### GOVERNMENT DOCUMENTS

Vogel, Robert. *A Breviate of British Diplomatic Blue Books, 1919-1939*. Montreal: McGill University Press, 1963. 474p. \$10.50.

Planned as a continuation of Temperley and Penson's useful *Century of Diplomatic*



*Blue Books, 1814-1914* (1938), the present work includes some eighteen hundred items in a chronological listing. Arrangement within each year or session is categorical rather than topical (i.e., bills, general sessional papers, and command papers), so that the detailed index must be used for any kind of subject searching. For each item, bibliographic information includes full title, volume number in the collected set of parliamentary papers (and beginning page, applicable only in Parliament's own set), command number if any, and exact date of presentation. In addition to purely diplomatic items, there is a generous inclusion of domestic papers of potential interest in the study of diplomatic questions. A lengthy preface reviews chronologically the general course of British diplomatic policies throughout the twenty-year period.—J.N.W.

#### STATISTICS

*Statistical Sources.* Edited by Paul Wasserman [and others]. Detroit: Gale Research Co., [1962]. 288p. \$15.

Under alphabetic subject headings ("Abrabives" through "Zoology—Degrees Conferred") are listed sources of current statistical information, usually a publication but occasionally an organization or agency where no specific publication is available. The United States government is, understandably, predominant here but the occasional citing of other sources and the efficient arrangement make the work a useful adjunct to the *Monthly Catalog* and the *Statistical Abstract*.—E.J.R.

#### POLITICAL SCIENCE

Bildungswerk Europäische Politik. *Bibliographie zur europäischen Integration.* [Düsseldorf]: Europa-Union Verlag, 1962. 180p. DM. 9,80.

This is a compact listing of some six hundred basic German and French (with some English and Italian) books. Its main sections are devoted to selected titles on various aspects of European integration: the organizations developed; the relations of these organizations among themselves and with NATO, East Europe, and Africa; and the problems and achievements of European economic integration attempts. A first section lists titles on the theory and the legal,

social, and political background of international organizations. The last section cites bibliographies, yearbooks, handbooks, serial publications of the organizations, and journals regularly publishing articles on European unity. Each entry, annotated in German, gives full imprint and pagination. There is an author index.—E.J.R.

#### EDUCATION

Drouin, Edmond G. *The School Question: a Bibliography on Church-State Relationships in American Education, 1940-1960.* Washington: Catholic University Press, 1963. 261p. \$7.50.

Public aid to church-related schools, released time, Bible reading and the wearing of religious garb in public schools are among the many aspects of the "school question" considered in this bibliography. Some thirteen hundred items (books, periodical articles, graduate theses, and court decisions) are listed in a classified arrangement, with an index of authors, editors, cases, and book titles. Many entries are annotated. The compiler points out that the standard indexes—general, as well as those for religion, law, and education—were systematically searched in an effort to represent "all significant positions" on the question.—E.S.

*Guide to American Educational Directories, 1963; a Guide to the Major Educational Directories of the U.S.* Prepared by Bernard Klein. New York: B. Klein and Co., 1963. 322p. \$20.

Something of a catch-all, this volume lists thirteen hundred-odd titles, many standard, some not so well known, some of less than "major" importance. The title is too narrow and imprecise: many items are educational only by stretching the term; also, included are not only directories (of federal, state and local agencies and various private organizations) but many bibliographies of services and sources of information. There is comparatively little duplication of the *Guide to American Directories* (Supplement 4L116). Annotations for each entry set forth scope, arrangement, frequency, price, provenance. Arrangement is by title within rough subject grouping, e.g., Advertising, Camps, Financial Aid, Law, Travel. A very brief section of foreign directories is included.—E.J.R.

## DICTIONARIES

Springhetti, Emilio. *Lexicon linguisticae et philologiae*. Rome: apud Pontificiam Universitatem Gregorianam, 1962. 687p. (Latinitas perennis VI).

At head of title: Schola Superior Litterarum Latinarum in Pontificia Universitate Gregoriana.

The author of this scholarly glossary of thousands of terms used in linguistics and philology has chosen to write the text of all definitions in Latin, giving in the preface a lengthy explanation of the reasons for his decision, this also in Latin. English, French, German, Spanish, Italian and Latin forms of the words defined are all listed in one alphabet; the actual definition is usually given from the Latin or Italian only, with cross references as needed from the other languages. General and specialized, popular and technical terms are all included, and although there is considerable variation in length and explicitness of the definitions, the relative balance seems well maintained.—J.N.W.

U.S. Joint Chiefs of Staff. *A Dictionary of United States Military Terms*. Washington: Public Affairs Press, 1963. 316p. \$4.50.

Technical and other terms of special meaning or significance in military affairs are briefly defined in this dictionary, earlier editions of which had been issued as Defense Department publications. Comprehensiveness is not claimed, and special attention is given to words and phrases which have come into wider usage since World War II. Weapons terms are "confined to significant modern weapons" (Foreword). A separate section lists words included in the "NATO Glossary of Military Terms and Definitions" and defines those not included in the main section, or for which the NATO-approved definition differs. There is a combined index for the two sections.—E.S.

## SCIENCE

Battelle Memorial Institute, Columbus, Ohio. *Guide to the Scientific and Technical Literature of Eastern Europe*, prepared for the National Science Foundation . . . October 1962. [Washington: 1963,] 94p. (NSF 62-49).

For Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Rumania and Yugoslavia, the guide "contains information on the announcement, procurement, and translation of East European publications in the physical, biological, and certain of the social sciences" (Intro.). Social sciences represented in the periodicals list are anthropology, archaeology, demography, ethnography, linguistics, statistics, and psychology. Medicine and agriculture are excluded. The work complements a similar guide for Soviet materials (*Supplement 4N1*).—E.B.

*Directory of British Scientists*. London: Benn, 1963. 1289p. £6 6s.

Not a "who's who," this alphabetic listing of some thirty thousand British men and women was compiled "on the basic premise of a degree in science from a British university" (Intro.). Excluded from this edition are Commonwealth scientists, engineers, those whose professional qualification is the equivalent of a degree, and those already included in the various directories of their professions. Even so, this volume offers an extensive register of persons actively engaged in or retired from work in various fields of science, including administration. For each name is given such information (supplied by the biographee) as: address, degrees, positions held, memberships, and publications. Useful appendices include a classification by field, a list of scientific societies and their journals, and a list of research establishments.—E.J.R.

*The Harper Encyclopedia of Science*. Edited by James R. Newman. New York: Harper & Row, 1963. 4v. 1379p. \$29.95.

Intended for the nonspecialist, this set was planned as a work of moderate length, covering "the whole field of science—the major facts and theories—from astronomy to zoology" (Intro.). As far as possible, "longish integrated articles" have been given preference over mere dictionary-type entries; biographical sketches of leading scientists are included; and there are numerous illustrations. In addition to cross references in the set itself, there is a detailed index. Volumes are paged consecutively; articles are signed with initials; and there is a bibliography in the final volume. Although the needs of the average educated user have

been the criterion, and while an effort was made to limit the use of jargon, the introduction points out that not every article (e.g., those on highly technical concepts and theories) will be understood by everyone. Even so, for the nonscientist and in the small library unable to afford the larger set, this should fill a need not always met by the *McGraw-Hill Encyclopedia of Science and Technology* (Supplement 4P20) with its rather more specialized orientation.—E.S.

U.S. Library of Congress. Science and Technology Division. *A Guide to the World's Abstracting and Indexing Services in Science and Technology*. Washington: 1963. 183p. (National Federation of Science Abstracting and Indexing Services Report, no.102) \$5.

This guide, which combines and brings up to date the information in *Index Bibliographicus*, v.1 (Supplement 4A4) and *A Guide to U.S. Indexing and Abstracting Services in Science and Technology* (Supplement 4N9), serves as an aid in searching the literature of science and technology, listing the major indexing and abstracting services in these fields currently published throughout the world. Included are serial publications of an association, government agency, library, professional society, or commercial body which contain "abstracts and/or references to currently published scientific and technical literature in the form of pamphlets, books, patents, technical reports, and related materials" (Intro.). The list (1855 entries from 40 countries) is arranged alphabetically by title, and detailed information is given for each service. Table of contents is arranged by Universal Decimal Classification; country and subject indexes add to the book's usefulness.—R.K.

#### LITERATURE

Grigson, Geoffrey. *The Concise Encyclopedia of Modern World Literature*. New York: Hawthorn, [1963]. 512p. \$15.

Spender, Stephen and Hall, David. *The Concise Encyclopedia of English and American Poets and Poetry*. New York: Hawthorn, [1963]. 415p. \$15.

These are, in a sense, companion volumes (with some overlapping) boasting good format, numerous high-quality illustrations, and

lists of distinguished contributors. Both run heavily to author entries, the articles being critical and evaluative with a minimum of biographical detail.

The Grigson work scarcely merits the designation "encyclopedia": apart from short introductory sections on national literatures and literary forms, it is "a volume of brief introductions to various writers who are worth reading" (Intro.). "Modern" is, in general, equated to "twentieth century" with emphasis on writers in English. The articles are not signed. Whereas the severe (and questionable) selectivity of the Grigson work allows treatment in some depth of chosen authors, the more generous policy of the Spender volume leads to inclusion of some author entries which provide little more than brief identification. The latter, however, emerges as a much more satisfactory reference tool: it covers the whole range of British and American poetry, with entries for general topics as well as for poets; most articles are signed with initials; omissions are much less obvious than in the Grigson work; and allotment of space seems generally sound.—E.S.

Kiell, Norman. *Psychoanalysis, Psychology, and Literature: a Bibliography*. Madison: Univ. of Wisconsin Press, 1963. 225p. \$5.

The relation between psychological theory and literature is an increasingly important subject, to which Mr. Kiell's work provides a needed key. Almost five thousand articles and monographs are included, from both primary and secondary sources, with no restriction as to school of thought. The aim was to secure as many items as possible from the 1900-1961 period, regardless of merit, although there is more scholarly than popular material. The editor makes no claim to exhaustiveness, and a spot check does reveal omissions. More serious failings are the lack of an author index (the material is arranged under fourteen broad headings), and the partial reliance of the subject index on title evidence alone. There are both a distressing number of typographical errors and an inconsistency in the translation of foreign language titles. The bibliography is welcome more as a pioneer effort than a definitive one, but it is nevertheless a valuable aid to an inadequately indexed field.—S.T.



Line, Maurice B. *A Bibliography of Russian Literature in English Translation to 1900 (Excluding Periodicals)*. London, Library Association, 1963. 74p. 24s. (Library Association Bibliographies, no.4).

The compiler has identified 426 items of nineteenth century translation into English from Russian literature, representing the work of forty-eight authors. Collections and anthologies are included, but not translations in periodicals. A chronological list of first appearances of translations in England or the United States supplements the main arrangement, alphabetical by author. There is also an index of translators. The work was planned to supplement Ettlinger and Gladstone's bibliography of English translations published between 1900 and 1945 (*Guide* R784), and the current annual, *Index Translationum*.—E.B.

Simmons, Merle Edwin. *A Bibliography of the Romance and Related Forms in Spanish America*. Bloomington: Indiana University Press, 1963. 396p. (Indiana University Folklore ser., 18) \$4.50.

Book and periodical studies of genuine Spanish-American folk ballads are listed here. Portuguese ballads and the works of "learned poets" (except for those of the colonial period) are not included. The author's policy, although selective, has been one of representative inclusion, so that the reader is at least directed to further sources if his special interest is not adequately covered here. All items which have been located and personally examined are annotated. Listings are based on geographical areas, usually identified by country. Each section is prefaced by a short essay on the general state of research and bibliographic control in that area, and there is an index of authors and titles.—E.A.

Smith, Gordon Ross. *A Classified Shakespeare Bibliography, 1936-1958*. University Park, Pa.: Pennsylvania State University Press, 1963. 784p. \$37.50.

Designed as a continuation of the Ebisch and Schücking bibliographies (*Guide* R436), this compilation is much less selective than those works, but without claim to comprehensiveness. It is "strictly speaking only a bibliography of everything on Shakespeare that has appeared in certain standard bibli-

ographies, mostly annuals [e.g., *PMLA* and *Shakespeare Quarterly*]" (Foreword). In addition, many dissertation bibliographies have been gleaned for Shakespeare items, including any pre-1936 dissertations not in Ebisch and Schücking. The table of contents provides a detailed outline of the subject classes which are generally continued from Ebisch and Schücking, with some additions and amalgamations. Items are repeated in more than one class where appropriate but, regrettably, there is no index. On the whole, however, this represents the admirable execution of a formidable task.—E.S.

#### BIOGRAPHY

*Who Was Who in America: Historical Volume 1607-1896*. Chicago: Marquis, 1963. 672p. \$26.

A supplementary volume to the *Who Was Who in America* set, this historical volume treats Americans and other significant figures in the early development of the country. As pointed out in the preface, the cutoff dates are not exact, and some persons deceased before 1607 and after 1896 are included. In the large reference collection the work will be useful mainly for quick reference since prominent careers are often reduced to lists of dates and offices held. Moreover, the majority of the 13,300 biographies are of United States congressmen, military and civil personnel who are covered in greater detail by other reference works. For the small library, however, and the home reference collection, the volume should be a welcome addition. The appended "Facts at your fingertips" section presents some useful lists of public officeholders and a chronology of major events.—E.Be.

#### HISTORY

Junod, Violaine I. and Resnick, Idrian N. *The Handbook of Africa*. New York: New York Univ. Press, 1963. 472p. \$10.

Designed to give a "factual picture" of African countries without editorial analysis or interpretation, this handbook indicates "basic source material by a thorough process of footnoting" (Introd.). Information which, with few exceptions, includes developments up to December 1961 is drawn from government documents, international organizations' publications, and standard nonofficial works. Arrangement is alphabetic by country, each

section listing minimal information for geography, history, government, population breakdown, social data, and economy, with sources clearly indicated. The only map is that which appears on the endpapers.—R.K.

*Repertorium fontium historiae medii aevi, primum ab Augusto Potthast digestum, nunc cura collegii historicorum e pluribus nationibus emendatum et auctum.* Rome: apud Istituto Storico Italiano per il Medio Evo, 1962- . v.1- . (In progress?)

Contents: v.1, Series collectionum. 819p. 115,000.

Planned by an international committee of medievalists, this first volume of a "new Potthast" (*Guide* V87) reveals the good judgment of the group and the careful editing of the compilers. In content it corresponds, generally, to the first major section, p.xxii-cxlvii, of the old work: i.e., an alphabetical listing of several hundred sets of chronicles, miscellanies, and other collections of medieval sources, together with their contents. Considerably expanded in size, it contains some sets omitted by Potthast and, of course, many published since the original work appeared, including a good representation of Byzantine, Arabic, Jewish, and Turkish materials not covered in Potthast. Bibliographic treatment of both series and individual titles is excellent—unfortunately not always the case in Potthast. Cross references are abundant, and rules of entry are carefully explained and illustrated (in Latin, as are the prefaces). Appended to the body of the work is an index of the collections by country or region.—J.N.W.

Sakamaki, Shunzo. *Ryukyu: a Bibliographical Guide to Okinawan Studies, Surveying Important Primary Sources and Writings in Ryukyuan, Japanese, Chinese, and Korean.* Honolulu: Univ. of Hawaii Press, 1963. 353p. \$10.

Noting the varied opportunities for research in Ryukyuan studies, the compiler has sought "to indicate the nature and scope of the literature on Ryukyu in East Asian languages, particularly in the fields of the social sciences and the humanities, from earliest times until the summer of 1961" (Pref.). Manuscript, book, and periodical materials are presented under broad topical headings,

e.g., "Early Ryukyuan Source Material," "General Works on Ryukyu," "Ryukyuan Literary Arts," with numerous subdivisions for each. Much of the material is annotated. Authors and titles are given in transliteration in the bibliography, with oriental characters supplied in the indexes of titles of works, of authors, and of periodicals. Unfortunately, page references are provided only in the title index, and the table of contents provides the only subject index to the wealth of material in the bibliography.—E.S.

Shapiro, David. *A Select Bibliography of Works in English on Russian History, 1801-1917.* Oxford: Blackwell, 1962. 106p. 10/6.

One aim of the compiler was "to furnish some notion of the present state of Western research on nineteenth and early twentieth century Russian history" (Pref.). American and English research is represented by the more substantial contributions in book and article form. Items are grouped under such headings as "General History," "Foreign Relations," "Economic History," with an index of authors and persons mentioned in the titles. There are references to reviews when the book is important or the title might be misleading, and some succinct comment by the author, a Research Fellow of Nuffield College, Oxford.—E.B.

West, John. *Village Records.* London: Macmillan; New York: St. Martin's Press, 1962. 208p. \$6.

"This book does not profess to be a complete outline of English local history, . . . but provides a series of practical exercises in documentary study" (Pref.). Documents are grouped in four historical periods, with a brief note on the political and social background; each type of document is introduced by a summary of its history and administrative origins, illustrated by a typical example, and followed by lists of suggested readings and of printed editions of texts and calendars. Although intended primarily for the beginning student or amateur historian having access to the documents and records described, this should nonetheless prove a useful handbook for students of English history and literature working abroad—both for the method of presentation and for the many bibliographical references.—E.S. ■■

# Grants Awarded by ACRL Committee

SIXTY-FOUR college and university libraries in twenty-seven states were awarded funds or equipment by the Grants Committee of ACRL at its ninth annual meeting at the University of Pittsburgh, December 1-3, 1963. In addition, three grants were made to individual librarians for research. The committee considered 280 requests for grants from institutions in forty-three states and sixteen requests from individual librarians. Total requests amounted to more than \$275,000.

The grants to libraries and individuals total approximately \$40,000, ranging from \$220 to \$1,200 each. Of the total, \$7,500 was made in twelve grants for equipment. The remaining amount was awarded to fifty institutions for the purchase of books, periodicals, music scores, and microfilm.

Fifteen of the institutions receiving grants are to be congratulated for their plans to match the funds provided through the Grants Committee. One college will receive a gift of five times the amount provided by the ACRL grant.

Thirty of the grants were made for the purchase of books and other material to support the fields of literature, art, education, social studies, biology, chemistry and physics, and a variety of area studies. The latter cover a number of geographic areas: Africa, Asia, Latin America, Near East, and Russia; and subject areas such as race relations, business, religion and culture. Seven grants were made to help purchase periodical materials; five for microfilm, and five for reference materials. Six grants will help institutions to acquire various parts of the Library of Congress Catalog and the National Union Catalog. One institution plans to publish a brochure describing its special collections in order to make them more widely known and promote greater use. Other libraries will purchase materials to support a symposium, a freshman independent studies program, and two honors programs.

The equipment grants made through the

cooperation of the Remington Rand division of Sperry Rand Corporation, provided for card catalogs, magazine racks, exhibit cases, phonograph record shelving, study tables, and desks.

The 1963/64 Grants Program was made possible through the generosity of the McGraw-Hill Publishing Company; Micro Photo Division of Bell & Howell Company; The National Biscuit Company Foundation; Olin Mathieson Chemical Corporation; Pitney-Bowes, Inc.; Remington Rand Division of the Sperry Rand Corporation; Time, Inc.; United States Steel Foundation, Inc.; and The H. W. Wilson Foundation, Inc.

The program was initiated in 1955 with a grant of \$30,000 from the United States Steel Foundation, which continues to play a vital role. The committee has been concerned, since the beginning of the program, with meeting the needs of libraries in privately endowed institutions with four-year programs of undergraduate instruction. Comments of librarians of these colleges and universities indicate that the program has been successful in developing library collections, improving the quality of service, and strengthening the total library programs. However, the committee is also very much aware of the importance of enlarging the size of the Grants Program, when it compares the number of requests with the funds available to meet these requests.

Members of the ACRL Grants Committee for 1963/64 are: Mark M. Gormley (chairman), librarian, University of Wisconsin-Milwaukee, Milwaukee, Wis.; Humphrey G. Bousfield, librarian, Brooklyn College, Brooklyn, N.Y.; Helen M. Brown, librarian, Wellesley College, Wellesley, Mass.; Wen Chao Chen, librarian, Kalamazoo College, Kalamazoo, Mich.; Richard B. Harwell, librarian, Bowdoin College, Brunswick, Me.; David Kaser, director, Joint University Libraries, Nashville, Tenn.; Neal R. Harlow (ex officio, ACRL President), dean, Graduate School of Library Service, Rutgers University, New Brunswick, N.J.; and George



M. Bailey (ex officio), executive secretary, ACRL, 50 East Huron Street, Chicago.

#### 1963/64 ACRL GRANTS

Antioch College, Yellow Springs, Ohio (Paul Bixler) \$375.  
Atlantic Christian College, Wilson, N.C. (Mrs. Irene B. Harrell) \$1,200.  
Augsburg College, Minneapolis, Minn. (Mrs. Marjorie H. Sibley) \$400.  
Beaver College, Glenside, Pa. (Elizabeth L. Hammond) \$300.  
Briar Cliff College, Sioux City, Iowa (Sister Mary Annette, O.S.F.) \$475.  
Carson-Newman College, Jefferson City, Tenn. (Mildred Iddins) \$750.  
Catherine Spalding College (formerly Nazareth College), Louisville, Ky. (Sister James Ellen Huff) \$500.  
Chatham College, Pittsburgh, Pa. (Benjamin B. Richards) \$500.  
Colby College, Waterville, Me. (John R. McKenna) \$1,000.  
College of Great Falls, Great Falls, Mont. (Sister Rose Frances) \$600.  
College of Idaho, Caldwell, Idaho (Richard G. Elliott) \$600.  
College of Notre Dame, Belmont, Calif. (Sister Mary Justine, S.N.D. (de N.)) \$300.  
The College of St. Benedict, St. Joseph, Minn. (Sister Imogene Blatz, O.S.B.) \$650.  
The College of St. Catherine, St. Paul, Minn. (Sister Marie Inez) \$500.  
College of Saint Teresa, Winona, Minn. (Sister M. Eone) \$500.  
Colorado College, Colorado Springs, Colo. (Joan Shinew) \$350.  
Colorado Woman's College, Denver, Colo. (Pearce S. Grove) \$1,000.  
Dominican College, Racine, Wis. (Sister M. Helen, O.P.) \$300.  
The Dominican College of San Rafael, San Rafael, Calif. (Sister M. Marguerite, O.P.) \$500.  
Duquesne University, Pittsburgh, Pa. (Eleanor McCann) \$1,200.  
Eastern Baptist College, St. Davids, Pa. (Ethel Klingerman) \$500.  
Emerson College, Boston, Mass. (Irene Christopher) \$500.  
Fisk University, Nashville, Tenn. (Arna Bon-temps) \$1,000.  
Fontbonne College, St. Louis, Mo. (Sister Alberta Ann Ruys) \$220.  
Franklin and Marshall College, Lancaster, Pa. (Herbert B. Anstaett) \$1,200.  
Gettysburg College, Gettysburg, Pa. (Mrs. Lillian H. Smoke) \$500.  
Goucher College, Towson, Md. (Sarah D. Jones) \$500.  
Hiram College, Hiram, Ohio (Thelma R. Bum- baugh) \$750.

Hobart and William Smith Colleges, Geneva, N.Y. (William R. Lansberg) \$475.  
Houghton College, Houghton, N.Y. (Esther Jane Carrier) \$750.  
Judson College, Marion, Ala. (Juanita G. Grant) \$300.  
Kenyon College, Gambier, Ohio (Edward C. Heintz) \$1,000.  
Knoxville College, Knoxville, Tenn. (Mrs. Lois N. Clark) \$450.  
Loretto Heights College, Loretto, Colo. (Mad- eleine Gibbons) \$450.  
McPherson College, McPherson, Kans. (Vir- ginia Harris) \$300.  
Manchester College, North Manchester, Ind. (Ruth Coblentz) \$300.  
Mills College, Oakland, Calif. (Flora Elizabeth Reynolds) \$500.  
Mississippi College, Clinton, Miss. (J. B. How- ell, Jr.) \$350.  
Monmouth College, Monmouth, Ill. (Harris Hauge) \$300.  
Moravian College, Bethlehem, Pa. (Henry L. Williams) \$350.  
Mount St. Mary's College, Los Angeles, Calif. (Sister Catherine Anita, C.S.J.) \$500.  
Muhlenberg College, Allentown, Pa. (John S. Davidson) \$300.  
Mundelein College, Chicago, Ill. (Sister Mary Clara, B.V.M.) \$750.  
Nasson College, Springvale, Me. (Luella C. Benson) \$850.  
Northwestern College, Orange City, Iowa (Helen Van Wechel) \$750.  
Pfeiffer College, Misenheimer, N.C. (Velma M. Huie) \$1,000.  
Saint Joseph College, West Hartford, Conn. (Sister Regina Mary) \$500.  
St. Mary's Dominican College, New Orleans, La. (Sister Mary Reginald, O.P.) \$300.  
Trinity University, San Antonio, Tex. (James F. Govan) \$300.  
Union College, Barbourville, Ky. (J. B. Mc- Ferrin) \$465.  
Washington College, Chestertown, Md. (Rob- ert G. Bailey) \$750.  
Wesleyan College, Macon, Ga. (Betty Bren- der) \$500.

#### 1963/64 EQUIPMENT GRANTS

Andrews University, Berrien Springs, Mich. (Mrs. Mary Jane Mitchell) Card Catalog Unit.  
Bennett College, Greensboro, N.C. (Constance H. Marteen) Card Catalog Unit.  
Buena Vista College, Storm Lake, Iowa (Lucile F. Vickers) Atlas Stand.  
College of the Holy Names, Oakland, Calif. (Sister Raphael Mary) Magazine Rack.  
Friends University, Wichita, Kans. (Mrs. Amy F. Cobb) Card Catalog Unit.

Lincoln University, Lincoln University, Pa. (Donald C. Yelton) Exhibit Case.  
 Marian College, Indianapolis, Ind. (Sister Clarence Marie, O.S.F.) Shelving for Phonograph Records.  
 Marion College, Marion, Ind. (Virginia L. Waymire) Card Catalog Units.  
 Menlo College and School of Business Administration, Menlo Park, Calif. (Herbert W. Mansfield) Study Tables.  
 Missouri Valley College, Marshall, Mo. (Ruth Zahn) Card Catalog Units.  
 Rosemont College, Rosemont, Pa. (Mother Mary Dennis, S.H.C.J.) Secretarial Desk and Chair.  
 Spring Hill College, Mobile, Ala. (Robert J. Zietz) Card Catalog Unit.

Research Grants for individual programs were made to:

J. Perriam Danton, professor of librarianship, University of California, Berkeley, to support the indexing of *Festschrift* contributions, particularly those in Slavic, Scandinavian, and Spanish languages, \$800.

Robert D. Harlan, assistant professor of librarianship, University of California, Berkeley, to complete research on a bio-bibliographical study of the eighteenth century Philadelphia printer, publisher, and bookseller, David Hall, \$500.

Paul Wasserman, librarian and professor, Graduate School of Business and Public Administration, Cornell University, to study the problem of the application of data processing techniques to library procedures in college and university libraries, \$1,000.

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## ACRL Microcard Series— Abstracts of Titles

THE ACRL MICROCARD SERIES is published for ACRL by the University of Rochester Press under the editorship of Mrs. Margaret K. Toth. Titles are available directly from the Press. Recently published titles include:

JONES, HAROLD D. *The development of reference services in colleges for teacher education, 1929-1958*, 83l. \$1.50.

This study examines and records the development of reference services in colleges for teacher education during the three decades 1929-1958. For the earlier years it includes some consideration of the reference function in the libraries of normal schools. It is mainly concerned with reference services in teachers colleges, in the many state colleges which are chiefly institutions for teacher education, and in the small but increasing number of state universities which originated as normal schools, became teachers colleges, and are still much concerned with teacher education.

Excluded from the survey are the libraries serving students and faculty members in university departments and schools of education.

The present study appears to be the first to present an extended review of the subject. It attempts to summarize the available data on supervision, on information, guidance, and instructional services, on bibliog-

raphy and appraisal. Reference is made to articles published in professional journals, and to a number of theses and dissertations. Reports resulting from accreditation programs and from surveys made by individuals or organizations have been drawn upon.

HARRISON, ELIZABETH COTH- No. 140  
 RAN. *Current reference practices in four university libraries in North Carolina*. (Thesis: M.S. in L.S., University of North Carolina, 1960) [vii], 121l. \$1.50.

Current patterns in the organization, staffing, and services provided by ten reference units in the libraries of the University of North Carolina, Duke University, North Carolina State College of Agriculture and Engineering, and Woman's College of the University of North Carolina were determined through interviews with the chiefs of each of these units and with other library staff members. Analysis and tabulation of this data, study of organization charts of the four libraries, and histories of reference service in the United States and of the four libraries show that the majority of units surveyed are general and centralized, though there is some subject specialization. The form of organization, staff qualifications, and services rendered reflect the size and academic needs of the colleges and universities they serve.

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# News from the Field

## ACQUISITIONS

AMERICAN INDIAN LANGUAGE items and others numbering some eleven hundred have been acquired by San Diego State College library, which has obtained the library of the late John Peabody Harrington, linguistics scholar and authority on American Indian languages.

GLEESON LIBRARY of the University of San Francisco has been given a first edition of *Utopia* by Mrs. Samuel Stark of San Francisco.

THE PAPERS OF PAUL SHOUP, covering mainly the period 1929 to 1938, have been given to Stanford University libraries. Mr. Shoup was president and chairman of the board of Southern Pacific Company, on the board of Stanford, and interested in land development and oil in California.

STANFORD UNIVERSITY LIBRARY has received a collection of some 130 volumes of Western Americana from the library of the late J. Henry Meyer, the gift of E. Olga Meyer.

ONE OF ABOUT FORTY copies of a privately printed and uncopyrighted book of tributes to the late Joseph P. Kennedy, Jr., edited by John F. Kennedy and produced by the Harvard University Press in 1945, recently was purchased for the Lilly library, Bloomington, Ind. When it became known that the Library of Congress did not have a copy, the volume that had been presented to the officers and men of the USS "Joseph P. Kennedy" was donated to LC.

THE AIR FORCE CAMBRIDGE RESEARCH LABORATORIES library has acquired the Lord Rayleigh Notebooks, thirty-four manuscript volumes which include much unpublished data and records of experiments.

ASSUMPTION COLLEGE LIBRARY at Worcester, Mass., has acquired a microfilm edition of *Histoire Litteraire de la France*, Part I.

STATE UNIVERSITY COLLEGE LIBRARY, Cortland, New York, has purchased some

eight hundred social studies textbooks from the library of Daniel C. Knowlton of Cazenovia, New York. The collection represents the period 1818-1940 with texts in United States history, economics, and civics.

CORNELL UNIVERSITY has been given a collection of some three thousand items on Abraham Lincoln.

OHIO STATE UNIVERSITY LIBRARIES has purchased several items of Nelson Algren materials including a typescript of an unpublished and unproduced scenario of *The Man with the Golden Arm*, and an uncorrected, signed galley proof of the novel.

Ohio State also has acquired the manuscript for a thirty-one page chapter of "Our Old Home" last published work of Nathaniel Hawthorne.

THE OFFICIAL PAPERS of the late Francis E. Walter, Representative from the Fifteenth Congressional district of Pennsylvania have been deposited at Lehigh University library. Walter was for many years a member of the House Judiciary Committee, and co-sponsor of the McCarran-Walter immigration act of 1952.

THE UNIVERSITY OF PENNSYLVANIA library has acquired the Baugh collection of scholarly medieval texts in English and French and monographs and journals in philology and language.

A TIBETAN ENCYCLOPEDIA in 63 volumes, containing the collected writings of an eighth-century Buddhist monastic order has been purchased by Yale University library. The set, one of two copies in the western world, was obtained from the estate of Theos Bernard of California; only about 5 per cent of the highly esoteric writings have been translated.

## AWARDS, GRANTS, SCHOLARSHIPS

THE MEDICAL LIBRARY ASSOCIATION is offering the Marion Dondale scholarship of \$1,000 to the holder of a bachelor's degree



(preferably in the life sciences, chemistry, anthropology, psychology, geology, mathematics, or physics) who is interested in entering the medical library field. Deadline for applications is March 1, 1964.

A COMMON VOCABULARY for government scientific and technical information systems will be studied by Datatrol Corporation, Silver Spring, Md., working with a \$46,360 grant from National Science Foundation.

COLUMBIA UNIVERSITY has been granted \$54,000 by the National Science Foundation for a study of information requirements of scientists.

THE AMY LOVEMAN NATIONAL AWARD of \$1,000 is offered for the third year to an American college student who has collected the best personal library. Entries will be accepted from any undergraduate student in a United States college or university with a collection of thirty-five or more books. Nominations for the national award will be made from local entrants by chairmen of campus committees before April 30, the closing date for the national entries.

WINNERS of the second annual Library Buildings Award Program sponsored by the American Institute of Architects, ALA, and the National Book Committee will be announced during National Library Week, April 12-18.

A GRANT of \$1,500,000 has been made by the Carnegie Corporation to the United Negro College Fund which serves thirty-two colleges and universities in fund-raising activities; among the stated uses of the grant monies is improvement of libraries in the member institutions.

UNIVERSITY OF CALIFORNIA, Berkeley, is offering a \$3,000 doctoral fellowship in the the school of librarianship for the academic year 1964-65. A half-time teaching assistantship paying \$2,390 and several half-time research assistantships paying \$2,000 also are available to doctoral candidates. For MLS candidates, there are several quarter-time research assistantships paying \$880.

UCLA has received a \$50,000 gift from the Lockheed Leadership Fund to establish in the business administration library a collection on the history and comparative development of business enterprise, to be known as the Robert E. Gross collection, a memorial to the founder of Lockheed Aircraft Corporation.

ROBERT BRAY of the Library of Congress' division for the blind in October was awarded the Migel Medal by the American Foundation for the Blind.

BOWDOIN COLLEGE has announced the establishment of a library fund named for the late Professor Alfred Rehder of Bowdoin, the gift of Gerhard O. Rehder, Bowdoin graduate and one time member of its faculty.

Bowdoin College library also has received a gift in memory of Earl Scott Miller, income from which will be used to purchase books; the fund was established by Arthur D. Karp and Robert Miller.

THE NEW YORK PUBLIC LIBRARY will make available its comprehensive collection of some ninety thousand recordings, until now in dead storage. The collection will be prepared for use in the Performing Arts library at Lincoln Center. Under a grant of \$150,000 from the Rodgers and Hammerstein Foundation, the collection will be cataloged and listening equipment will be provided. The collection will be known as the Rodgers and Hammerstein Record Archives.

## BUILDINGS

BOISE (Idaho) Junior College laid the cornerstone of a new library-classroom building on November 18. The library, occupying the ground floor, will have seating for 275 students and stack space for fifty-two thousand volumes. Expansion space for the library on the second floor will be provided by later construction of a humanities building to which English, speech and art department classrooms will be moved.

BOSTON UNIVERSITY plans a five-and-a-half-million dollar central library building with six stories above ground and two floors below ground, providing some two-hundred-thousand square feet of space for a total book capacity of one-million-four-hundred-thousand volumes and seating some twenty-three-hundred readers. Construction target dates have not yet been announced.

DARMOUTH COLLEGE, Hanover, N.H., dedicated its new biomedical library on October 11. Housing sixty thousand volumes, the three-story building will accommodate one hundred twenty thousand volumes.

HARTWICK COLLEGE, Oneonta, N.Y., plans construction of a library-museum

building during 1964. Lillian Slade of Oneonta has given \$250,000 toward the building fund.

THE GEORGE C. MARSHALL RESEARCH library now under construction at Lexington, Va., will be dedicated on May 23. The library of a private foundation, it is being built on land donated by the State of Virginia between the Virginia Military Institute and Washington and Lee University. The building will house the private and official papers of the late General George C. Marshall and books, documents, and other material relating to the period in history in which he played a part.

SEATTLE PACIFIC COLLEGE opened a new half-million dollar library building last September. The estate of the late James P. Wetter opened the building fund in 1961 with a gift of \$150,000, and the S. S. Kresge Foundation gave \$25,000.

## MEETINGS

THE AMERICAN SOCIETY FOR ENGINEERING EDUCATION and the Engineering School Libraries Committee will discuss the technical library's function and its educational responsibilities at the annual ASEE conference in Orono, Me., on June 22-26.

THE INDIANA CHAPTER of Special Libraries Association has announced a meeting with the Indiana chapter of the American Documentation Institute and the Indiana University Division of Library Science at Purdue University on October 2-3, 1964. Subject of the two-day meeting will be "Automation in the Library—When, Where, and How." Mrs. Theodora Andrews, pharmacy librarian at Purdue, is chairman.

## MISCELLANY

MICROFILMS of materials on Oceania in the Turnbull and the University of Auckland libraries in New Zealand will be made for the University of Hawaii library's Hawaiian and Pacific collection. Janet Bell, curator of the collection, recently completed a trip to New Zealand, Australia, and Fiji to select the materials. The tour was supported by the university and by a grant from the Samuel N. and Mary Castle Foundation. Miss Bell also discussed with the librarians of the countries she visited a proposed con-

ference to organize a Pacific research libraries association.

AMERICAN ANTIQUARIAN SOCIETY will continue its microform production of early American imprints, extending the project to all nonserial material through 1819. The Shaw-Shoemaker bibliography will be the basis of the extended project, as was Evans for the materials up to 1800.

MORTON N. COHEN of City College of New York is preparing a definitive edition of the correspondence of Charles Lutwidge Dodgson ("Lewis Carroll") and would appreciate hearing of locations of any letters written or received by him.

UNIVERSITY OF NORTH DAKOTA's Chester Fritz library has offered fifty high school students in the Grand Forks area the privilege of using the library and has issued special library cards for the students in honors programs and other outstanding high school pupils who were recommended by their faculty.

A SECOND EDITION of *Export and Import of Business Films* has been announced by the Association of National Advertisers. Dealing with standards and regulations governing overseas shipment of sponsored films, it provides information on procedures for securing certification by the U.S.I.A.

A STUDY of academic and research related libraries to determine the ability of these libraries to support an expanding program of higher education and industrial development has been announced by the Pennsylvania State library. The Institute of Public Administration at Pennsylvania State University will assist in the study, which will continue through June 1964.

PROJECTED MEDICAL CENTER LIBRARIES in Bombay, India, and Bangkok, Thailand will have "on the spot" consultant services by Alderson Fry, librarian at West Virginia University medical center. His two-month consulting trip is financed by the Rockefeller Foundation of New York. Dr. Fry will also make short consultant visits to medical libraries in Tokyo and Osaka, Japan; Manila, Philippines; Kuala Lumpur, Malaya; and New Delhi, India.

THE FIRST REGIONAL CENTER for training librarians from French-speaking African countries began at Dakar, Senegal, in November, through an agreement between the government of Senegal and UNESCO. ■■

# Personnel

GEORGE R. LEWIS became director of libraries at Mississippi State University on the opening of the 1963-64 school year. He had



*Mr. Lewis*

been director of library services at Kentucky Baptist College, a fairly new institution located just outside Louisville.

A native of Mississippi, Mr. Lewis lived in his home state until he left to do advanced study. He graduated from Mississippi College

in 1952 and completed the master's degree in librarianship at Louisiana State University in 1956. With a varied experience in library work, and especially with a wide knowledge of Mississippi and its many educational problems, Lewis is admirably fitted for the position which he now fills.

Mr. Lewis's first experience in library work was as a student assistant in the Mississippi College library, 1950-52. For two years, 1952-54, he was a teacher of English in the Forest (Mississippi) public schools. Deciding on a career in librarianship, he accepted a part-time position in the serials department at L.S.U. while pursuing professional study, 1954-56. Lewis's first position after completing his professional degree was as assistant public services librarian in the Baylor University library, Waco, Texas. After one year and three months in this work, he transferred to the position of assistant cataloger. It was from this position that he was called in early 1958 to become head of the circulation department of the Auburn University library, in Auburn, Alabama.

When Lewis moved to Auburn University, he found the library in a stage of growth and development. He contributed significantly to the planning of a new library building. As a member of the director's council at the library, Lewis met regularly

with that body, with the campus planning committee, and with the architect in formulating plans for the new library, which was dedicated on November 5, 1963. In addition to his work as head of the circulation department, Mr. Lewis supervised six branch libraries, the periodical reading room, and the audio-visual services of the library. He also assisted the director in the employment of clerical workers and part-time student assistants. His value was recognized by the administration when formal academic status was given to librarians: he was accorded the rank of assistant professor in 1959, and associate professor in 1960.

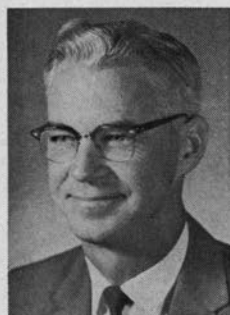
In June 1962, Lewis became the first director of library services at Kentucky Baptist College, near Louisville. In this capacity he made significant progress. He planned a new library building, employed a library staff, and began the acquisition and processing of library materials for this new college. The groundwork on which he laid the library program can be carried on successfully by another. He was reluctant to leave, but the call to be director at Mississippi State University and the challenge of the new position, plus his desire to work again for his native state, compelled him to resign and accept his present position. M.S.U. is growing and expanding its services and facilities, and Lewis is planning the library program to support the university more adequately.

Endowed with honor and integrity, good common sense, and a sound knowledge of library practices, Mr. Lewis should be eminently successful at the Mississippi State University library. Friendly and personable at all times, he is well liked by his confreres and patrons.—*Clyde Hull Cantrell*.

HOWARD F. MCGAW became director of the library of Western Washington State College at Bellingham on September 1, having resigned from his most recent position, that of acting librarian at Texas Southern University in Houston. Previous to that, he had been, from 1950 to 1961, director of



libraries and professor of library science at the M. D. Anderson Memorial library of the University of Houston.



Mr. McGaw

Born in Nashville, Mr. McGaw received his AB from Vanderbilt in 1933, his MA from Peabody in 1939, and his BS in LS from Peabody in 1941. From 1940 to 1942 he was head librarian at Memphis State College, and from 1942 to 1943 at the Herzl Municipal Junior College in Chicago.

From 1946 to 1949 he was director of the library at Ohio Wesleyan University. In 1950, he conducted a survey of teacher education resources in New York City municipal college libraries, and received the doctorate from Teachers College, Columbia University.

His dissertation, published in 1952 as *Marginal Punched Cards in College and Research Libraries*, is still useful as a guide to the application of hand-sorted cards to library operations.

Through the years he has taught summer courses in library science in various schools—Peabody, the universities of Kentucky and North Carolina, the New York State College for Teachers at Albany, Denver University—in addition to courses at the University of Houston. He has written a variety of articles on such topics as circulation systems, educational TV, staff relations, and weeding the library.

A faithful worker for library associations, he has served in numerous offices in the Texas Library Association, the Southwestern Library Association, ALA (ACRL, LAD), and Beta Phi Mu.

As a member of the American Society of Friends he has taken an active part in community affairs. Personally gentle and amiable in disposition, fond of sports, books, and music, he has been a fighter for the causes in which he believes. Humanist, internationalist, pacifist, ardent supporter of civil rights, member of the Houston Council on Human Relations, of the American

Humanist Association, of the Houston chapters of the AAUP and the American Civil Liberties Union, he has served on the United Nations Council of Houston, and played a leading part in the Houston Institute of International Relations.—Elizabeth Rodell.

The University of Alaska announced with justifiable pride the appointment of H. THEODORE RYBERG as director of libraries, October 1. This major institution of higher education in Alaska is a system of institutions. Mr. Ryberg assumed responsibility for the university library, the libraries supporting the research programs of the Geophysical Institute, Institute of Marine Science, the Agricultural Experiment Station, and the Arctic Research Laboratory, as well as the libraries providing instructional materials at five community colleges. This impressive responsibility was fortunately given to a librarian whose professional competence and capacity for leadership are equally impressive.

Mr. Ryberg has made better use of his thirty-six years than many others do in four score and ten. During three years he spent in the United States Maritime Service he circled the world twice and the experience prompted him to spend another year in Europe studying before he entered Gettysburg College. His tour of duty as an ensign in the Navy was followed by six months of study and travel in the Middle East. Between his graduation from Gettysburg College in 1955 and his admission to the school of library science at Western Reserve, he spent a year teaching and studying in northern Europe and Scandinavia. The combination of his formal education and extensive travel has been invaluable to him and to the institutions which have given him professional experience.

Mr. Ryberg began his library career in 1957 as cataloger at the Rochester (New York) Institute of Technology library where, with characteristic vigor and good judgment, he reorganized the cataloging function and recataloged a collection of thirty-two thousand volumes. From May 1959 to September 1960 he was assistant director of libraries at the University of Buffalo, and during the past three years Mr. Ryberg was assistant director of libraries at Syracuse

University. The legacies he has left at Syracuse University are many, but the university community is especially grateful to him for the imaginative thinking and sound judgment with which he improved procedures, selected staff replacements, and expanded the service program.

While Mr. Ryberg has devoted great energy to his professional work, he has been active in both state and national library association activities. Librarianship in Alaska has a potential new force in Mr. Ryberg, and he can be expected to add a new dimension to its advancement.—*Wayne S. Yenawine.*

### APPOINTMENTS

ALBERT G. ANDERSON, JR., has been appointed head librarian at Worcester (Mass.) Polytechnic Institute.

MARCIA BARTLE has accepted a position as assistant serials cataloger at Indiana University library, Bloomington.

MRS. HELEN BEAVIN has joined the staff of the education library at Boston University as resources librarian.

DANIEL BERGEN has been appointed assistant professor, Syracuse University school of library science.

RAYMOND A. BOHLING has been appointed assistant director of libraries at University of Minnesota.

MRS. DORIS BOLEF is the new catalog librarian at Washington University school of medicine, St. Louis, Mo.

JEAN BROTSMAN is the new head of the documents department at San Diego State College library.

GLENN BRUDVIG has been appointed assistant professor and supervisor of departmental libraries at University of Minnesota.

MRS. SUSAN BRYNTESON is now assistant acquisitions librarian at San Diego State College library.

WILLIAM S. BUDINGTON has been delegated responsibility for the operation of John Crerar library in Chicago, as part of a realignment of personnel there.

KAY L. BURKHART is now a descriptive cataloger in the Library of Congress.

MRS. LOIS L. CHAN has been appointed to the order department staff at Northwestern University libraries, Evanston, Ill.

PORTIA CHRISTIAN is assistant business librarian at Indiana University, Bloomington.

GERALD MASON COBLE is now adminis-

trative librarian for machine applications at the United States Veterans Administration library, Washington, D.C.

HELEN MARGARET COOPER is now head librarian at Wilson College, Chambersburg, Pa.

HOWARD W. CORDELL has been appointed head of public services at Florida Atlantic University libraries, Boca Raton.

ROBERT J. CROSS has been appointed associate librarian at Seattle University.

MRS. VILLA BAILEY CROWELL became assistant librarian for halls of residence libraries at Indiana University in September.

JOHN G. DALEY has been appointed instructor in the graduate school of library science, Drexel Institute of Technology, Philadelphia. Mr. Daley has been science librarian at Swarthmore College.

MRS. MARY JAMES DARNIELLE is assistant law librarian at Indiana University.

DOMINIQUE-RENE DE LERMA became head music librarian at Indiana University in September.

MRS. NATHALIE P. DELOUGAZ is a descriptive cataloger in the Library of Congress.

DAISY C. DENNIS has been appointed business librarian at Northwestern University, Evanston, Ill.

JOSEPH DERBYSHIRE has joined the Bowdoin College library as acquisitions librarian.

KEITH DOWDEN has been appointed assistant director for reader services, a new position at Purdue University, Lafayette, Ind.

SIEGFRIED FELLER has been named chief acquisitions librarian of University of Minnesota.

JOAN FLINTOFF has joined the staff of UCLA libraries catalog department.

EARL A. FORREST has been appointed head of the humanities division at Auburn (Tex.) University library.

BUDD LESLIE GAMBEE has been appointed to the school of library science, University of North Carolina. Dr. Gambee has been fine arts librarian at Detroit Public library, and chief librarian of the audio-visuals department at West Virginia University, Morgantown; more recently he has taught librarianship at Ball State Teachers College, State University of New York, and University of Michigan.

JANE GANFIELD has been appointed assistant director for processing services at Purdue University libraries, Lafayette, Ind.

GRADY E. GEIGER is head of circulation at Auburn (Tex.) University library.

MARY JANE GIBSON is a serials cataloger in the descriptive cataloging division, Library of Congress.

MARCIA GINGULD has joined the reference unit at National Institutes of Health library, Bethesda, Md.

MRS. BEVERLY K. GINTER has been appointed to the circulation staff at Woman's College library of Duke University, Durham, N.C.

MRS. CHAN-KI HAN is reference librarian at Chenery library, Boston University.

FRED JOHN HEINRITZ has been appointed assistant professor in the school of library science, University of North Carolina. He had been a member of the library staff at UCLA.

HERMAN H. HENKLE, librarian at John Crerar library, Chicago, has been appointed executive director of the library in addition to his present position.

MRS. ALICE PALO HOOK is now the librarian of the Cincinnati Art Museum.

BENJAMIN J. HOPKINS has been appointed head of the circulation department at Boston University's Chenery library.

MURIEL HOPPES is now research librarian of the legislative reference bureau, University of Hawaii, Honolulu.

MRS. DEVA R. HOWARD has been appointed to the documents department at Northwestern University libraries, Evanston, Ill.

PAUL J. HUGHES became chief of technical services at the National Institutes of Health library, Bethesda, Md., in September.

JANE CHING HWANG is a member of the cataloging staff of State University College library, Cortland, N.Y.

T. K. S. IYENGAR was appointed order librarian at Boston University last July.

MRS. VIJA L. KARKLINS is now with the cataloging unit of National Institutes of Health library, Bethesda, Md.

JOHN EDGAR KEPHART is on the faculty of the school of library science, University of Southern California, Los Angeles. He has been head of Westmont College library at Santa Barbara.

RAYMOND KILPELA has joined the faculty of the school of library science at University of Southern California, Los Angeles. He was head of card preparation at Purdue University libraries.

MRS. AGANITA KUO is a reference librarian

in the undergraduate library at Indiana University, Bloomington.

NIOVE KYPARISSIOTIS is now a descriptive cataloger in the Library of Congress.

MAX LANGHAM has been appointed head librarian at Albion College, Albion, Mich.

JOAN M. LEMENSE joined the circulation unit, National Institutes of Health library, Bethesda, Md., in November.

MRS. MARGARET MCNAUGHTON is now a reference librarian at Indiana University's undergraduate library, Bloomington.

LJERKA MARKIC-CUCUKOVIC is serving at the UCLA biomedical library during a leave from the school of public health library of the medical faculty at University of Zagreb, Yugoslavia, where she is head librarian. Dr. Markic is a participant in the program for foreign librarians jointly sponsored by ALA, Special Libraries Association, and the United States Department of State.

MRS. SHARON W. MASON has been appointed circulation librarian at Kearney (Neb.) State College library.

NORMA JOYCE MONTGEON has been appointed librarian in the Department of the Army in Germany, France, and Italy.

MRS. SYLVIA MORTIMER has joined the college library staff at UCLA.

RUSSELL A. NILE is newly-appointed to the reference staff at State University College, Cortland, N.Y.

ALMA ORTIZ has been appointed to the descriptive cataloging staff at Library of Congress.

TOHSOOK PAIK became catalog librarian at Boston University in September.

ALICE PAINE is now head cataloger at Nebraska State Teachers College library, Kearney.

JOHN L. PATTON is librarian of CBS-TV at Chicago.

AMMIEL PROCHOVNICK has been appointed assistant librarian for research services at John Crerar library, Chicago.

MRS. JOSEPHINE S. PULSIFER is a serials cataloger in the descriptive cataloging division of Library of Congress.

MRS. INKERI RANK is a new member of the catalog department at UCLA libraries.

DANIEL D. REICHER has been named assistant librarian at University of Saskatchewan, Saskatoon.

THOMAS L. REITZ has been appointed head of the acquisitions department at Wisconsin State College library, Whitewater.



RUTH L. SCHINI has been appointed to the position of instructional materials librarian at Kearney (Neb.) State College library.

SVATO SCHUTZNER is now a descriptive cataloger in the Library of Congress.

MRS. MARJORIE SHORE has been appointed to the acquisitions department at UCLA libraries.

MRS. CORNELIA SHUGART has been appointed to the general reference staff at University of California, Berkeley.

PETER STECKL has been named assistant librarian for science and medicine at the University of Toronto library.

MILTON E. STEPHENSON is now head of technical services at Florida Atlantic University library, Boca Raton.

MRS. CHERYL L. SWAN is now reference librarian of Woman's College library, Duke University, Durham, N.C.

ELIZABETH L. TATE has been named information analyst at the National Referral Center for Science and Technology.

ALAN R. TAYLOR became African bibliographer at Indiana University library last autumn.

LORINDA TAYLOR has been appointed catalog librarian at Colorado College, Colorado Springs.

HOWARD M. TEEPLE has been appointed to the order department at Northwestern University libraries, Evanston, Ill.

BERT A. THOMPSON has been appointed director of libraries at Kearney State College, Kearney, Neb.

JAMES H. THOMPSON is a subject cataloger on the staff of Duke University library, Durham, N.C.

MRS. MARGARETA THOMPSON has joined the staff of Duke University library as a descriptive cataloger.

NORENE THORSON was named assistant librarian of Boston University's education library in September.

SYLVIA C. UY is a serials cataloger at Library of Congress, in the descriptive cataloging division.

VERNERS J. VITINS became librarian of the St. Paul campuses of the University of Minnesota on November 1.

ROBERT L. VOLZ has been appointed rare book room assistant at Northwestern University libraries, Evanston, Ill.

MRS. SHARON WALENTA is now assistant circulation librarian at San Diego State College.

RICHARD D. WALKER has joined the instructional materials department at Southern Illinois University, Carbondale.

MRS. GLORIA WERNER has been appointed to the biomedical library staff at UCLA.

SUMIE YAMASATO is a descriptive cataloger in the Library of Congress.

## FOREIGN LIBRARIES

MIGUEL BORDONAU is now director of the Biblioteca Nacional, Madrid.

## NECROLOGY

WILLIAM MURRAY HEPBURN, head librarian at Purdue University from 1904 to 1944, died on November 13 at Richmond, Ind.

MRS. EMMA LOU LECKY, head of the card preparation unit at Purdue University libraries since last September, died on December 9.

ELLWOOD HUNTER MCCLELLAND, for forty years technology librarian at Carnegie library in Pittsburgh, died on October 16.

BERTHA L. ROCKWELL, head librarian at Barnard College for thirty-eight years until her retirement in 1944, died last September.

GEORGE A. SUMMENT, former acquisitions librarian at Drexel Institute of Technology, Philadelphia, died on September 17.

MARGARET TILLET, circulation librarian of Duke University Woman's College Durham, N.C., died on November 21.

VICTOR TUREK, head of the union catalog project at the University of Toronto library died on September 18.

MRS. GLADYS WALKER WHITE, engineering librarian at Princeton University, died on November 16.

## RETIREMENTS

EILEEN DONOVAN, head of Stanford University's engineering library, retired on September 30.

MRS. ALICE HICKS, reference librarian at Duke University's Woman's College for twenty-six years, retired on August 31.

FLORINE LEWTER, for seventeen years a member of the staff of Woman's College library, Duke University, Durham, N.C., retired last May.

NAOMI SCOVILLE, supervisor of the corrections unit of the subject cataloging division of Library of Congress, retired on October 31 after eighteen years at LC. ■■

# Review Articles

**Independent Historical Societies, An Enquiry into Their Research and Publication Functions and Their Financial Future.** By Walter Muir Whitehill. Boston: The Boston Athenaeum, 1962. xvii, 593p. \$12.50.

In the annals of American historical scholarship, no single group of institutions has loomed larger in importance than the major state and regional historical societies. Since 1791, when the Massachusetts Historical Society was founded, these organizations have pursued diligently the gathering and preserving of historical source materials without which a great deal of American history could not have been written. As historical research libraries they have been of primary importance in making possible a better understanding of the American past.

How these societies developed, what they have accomplished, and how we may expect to see them develop in the future are the questions to which Walter Muir Whitehill addresses himself in this book. Although the title of the book would seem to indicate that the author was concerned only with independent societies which operate without benefit of public funds—societies like the Boston Athenaeum, of which he is the very capable director—Mr. Whitehill actually has given us an erudite and comprehensive view of the whole historical society movement. The emphasis is on the independents, but he gives a great deal of attention to the non-independent societies and agencies which derive all or part of their support from public funds.

Dealing primarily with societies on the state and regional level, he describes their research facilities, publications, membership policies, and financial conditions. He also evaluates their past contributions and makes recommendations for their future development. His book is based on a study which he made of these societies in 1959-60 under a grant from the Council on Library Resources. It is an extremely valuable and excellently written analysis of these historical societies, and will be of immediate and practical value to those who work for or with these societies, and for all who would under-

stand better the nature of these organizations.

For all its good points—and this volume has them in abundance—*Independent Historical Societies* should be used with caution. Mr. Whitehill's reporting of the activities and programs of the nation's historical societies is generally accurate and perceptive, but his evaluation of these activities is essentially one-sided. This is because he represents only one of the two dominant present-day philosophies of historical society operation. Mr. Whitehill's view is that of the major independents, which maintain that the proper role of a society is to collect, preserve, and interpret manuscripts, books, and other materials which serve an essentially academic scholarly purpose. The broader view, held by many others, is that the society not only must serve these needs of the scholar but must also serve, in a variety of ways, the needs and interests of a great many nonscholars in the area which it serves.

Mr. Whitehill has a right to his opinions regarding the proper role of an historical society, but it seems to this reviewer that he is less than charitable in his evaluation of those societies which do not follow the pattern of the major independents. For example, he justifies the limiting of memberships by independent societies on the grounds that this will reduce the total cost of membership benefits, but he caustically applies the term "togetherness" to the efforts of other societies to attract a large membership and thereby reduce the unit costs of these benefits. He does not criticize the independent societies for restricting use of their facilities to members and credential-bearing scholars, but he levels a good deal of criticism at those societies which engage in such "peripheral" activities as historymobiles, junior historical societies, historic sites and markers, and other programs, in an effort to serve the needs of the nonscholar. He does not criticize the independent societies for not taking advantage of new developments in the graphic arts in the publication of their scholarly journals, but he applies the term "popularizing" to other societies that have used illustrations, artwork, color, and even

magazine format in the attempt to secure a wider reading audience. Going further, Mr. Whitehill maintains that this "sociability by participation" is usually "at the expense of scholarship"—a statement which, in this reviewer's opinion, is not borne out by the facts—and he says nothing on the question of whether drab appearance and unimaginative presentation are not major impediments to the wider reading of historical journals.

The crux of the matter is that Mr. Whitehill—and presumably the independent societies he admires so much—believes that "it is only the serious workers that count, and their numbers will always be small." Opposed to this view are many equally respected leaders and societies who believe that the number of people who "count" is very great indeed. Mr. Whitehill's book is a very informative and beautifully written report on the historical societies of the United States, and it is an eloquent exposition of the philosophy of the major independents. Those societies that pursue a broader range of activity will be fortunate indeed if their side of the story can someday be presented by as gifted and accomplished a scholar.—*William T. Alderson, Tennessee State Librarian and Archivist.*

**Special Libraries: How to Plan and Equip Them.** Chester M. Lewis, ed. New York: Special Libraries Association, 1963. (SLA Monograph No. 2) vi, 117p. \$5.55.

The past decade has witnessed a "population explosion" of special libraries, most of which serve clienteles in the sciences, engineering, or business. Over ten thousand such libraries (including those in governmental and academic institutions) are listed in Kruzas' *Directory of Special Libraries and Information Centers*. While more and more of these libraries, and the new ones just starting, have the benefit of professional librarians, too many have been administered, planned, and equipped by individuals who do not have the requisite skills and training for this work. Since the supply of experienced librarians is limited and the curricula of the library schools neglect to a large degree the problems inherent in planning and equipping small, specialized libraries, it is heartening to find a publication which speaks directly to this point.

The New York chapter of the Special Libraries Association, with Chester M. Lewis acting as editor, is to be congratulated for producing the present work which is based on a symposium on library planning held by the chapter in 1958. To the ten papers presented at the conference, four have been added. In addition, ten case histories have been included, most of which were originally printed in *Special Libraries*. An annotated bibliography on library planning, a directory of suppliers, and a subject index complete the text, which is well illustrated.

The editor wisely has not attempted a revision of Jackson's *Technical Libraries* but has limited the content to the physical planning and equipping of libraries. Inevitably, in a work of this kind, there is a certain amount of duplication between a few of the papers (e.g., Randall's paper on steel shelving and Price's on metal library equipment). On the whole, such duplication has been kept to a minimum. Somewhat disturbing, however, are contradictory statements which are permitted to stand without editorial comment. On page five it is suggested that an allowance of six to seven volumes per running foot for monograph titles be made and four to five for bound periodicals. On page seventeen a range from six to ten is suggested, and no differentiation between monographs and journals is indicated.

Similarly, on page five it is noted that the floor loading of books *plus* shelving varies from 110 to 140 pounds per square foot. On page forty-eight the figure of 140 pounds per square foot, *exclusive* of shelving is given. This can be most important, particularly if the library is located on the upper floors of an office-type structure. The library planner should be warned to give careful attention to this point.

As would be expected, the quality of the papers varies from writer to writer, both in content and style. The bibliography on planning appears reasonably complete and up-to-date. The directory of suppliers is useful but perhaps superfluous, the same information being obtainable elsewhere. The index is good. The Checklist for Planners, by Jeanette Sledge, should be particularly useful for those without previous experience in planning a library. One wishes that R. R. Shaw had used more space describing flow process charting, a highly useful technique



that will unquestionably become more important in library planning.

One dislikes quibbling with what is normally not an important consideration in a book of this type. However, one would expect this volume to be rather heavily used as a reference tool by the librarian and the paperbound format is not substantial enough to withstand much wear. While it is well recognized that the cost of book production is rising, the price charged for this book does seem somewhat out of line, given the format and size. Nonetheless, those planning new libraries will find much useful information here.—Robert Burton, *University of Michigan*.

### **The Cost Book of Carey & Lea, 1825-1838.**

Edited by David Kaser. Philadelphia, University of Pennsylvania Press, 1963. 355p. \$10. (61-6616)

On January 1, 1822, Mathew Carey retired from his prosperous publishing business in Philadelphia in favor of his son, Henry C., and his son-in-law, Isaac Lea. The firm's imprint then became that of H. C. Carey & I. Lea. These two carried on the firm's activities with great success for sixteen years, and by the time Henry retired in 1838 it was recognized as the dominant publishing house in the United States.

David Kaser's earlier study, *Messrs. Carey & Lea of Philadelphia*, published by the University of Pennsylvania Press in 1957, is a history of the firm from 1822 to 1838. It tells the story of Carey & Lea's vigorous and successful "drive to supremacy" with an account of their many important publishing ventures, their relationships with authors, American and foreign, and their influences on the book trade. In his preface to that work the author cited the cost book of the firm for 1825 to 1838 as one of his chief sources and announced that he was preparing it for publication. This promise has now, happily, been fulfilled.

The cost books for the early years of the firm, 1822-1825, apparently do not exist. The records for 1825 to 1838, however, are preserved in the Historical Society of Pennsylvania in Philadelphia. They constitute a detailed and systematic recording of the publishing activities of Carey & Lea and furnish financial data concerning the books and

magazines published by the firm, as well as other facts of historical and bibliographical value. A typical entry gives the cost of printing, paper, plates, and binding, along with the honorarium paid the author, the cost of advertising, and the date of publication. There is usually also an estimate of income from the sales of an edition of a specified number of copies, and the name of the printer.

All entries from the cost book are in the order in which they appear in the manuscript. Each item (679 in all) bears an individual number. Following the cost data, Kaser has added a bibliographical description of each title and had indicated one library location in each case. He has examined the books themselves and verified from actual copies the bibliographical details given. Following this main section is a supplement containing a list of titles known to have been published by Carey & Lea in the period but which are not entered in the cost book. This section includes many reprints of books previously published by the firm. These have also been checked and verified by comparison with library copies. The combined record of the books reaches 947 titles. It is clear that these descriptions have considerable bibliographical value since this period is only inadequately covered in existing bibliographies. A check of only a few examples against Roorbach's *Bibliotheca Americana* reveals many omissions in that basic source, among them such titles as the following: George Ticknor's *Remarks on the Life and Writings of Daniel Webster of Massachusetts*, 1831; Thomas Jefferson's *Notes on the State of Virginia*, 1825; several editions of Mathew Carey's *Reflections on the Proposed Plan for Establishing a College in Philadelphia . . . for Admission into Which No Prerequisite of Having Learned the Latin or Greek Shall Be Necessary*, 1826.

Two American authors whose careers in literature were greatly promoted by Carey & Lea's sponsorship were James Fenimore Cooper and Washington Irving. Both are heavily represented in the *Cost Book* listings, Cooper with seventy-five entries and Irving with forty-seven. *Tales of a Traveler*, by Irving, was published in 1824 and Cooper's *The Last of the Mohicans* in 1826, the first books by these authors to be issued

under the imprint of the firm. The first Cooper title for which cost figures are given is *The Prairie*, published in 1827. The total cost of production of 5,000 copies was \$7,322.24, of which \$5,000 was paid the author for the copyright. Cooper's reputation had already been established by the publication of *The Spy* in 1821 for which he acted as his own publisher. By way of comparison, it cost \$7,607.97 to produce 3,500 copies of *The Conquest of Granada* by Irving in 1829; of that amount \$4,750 went to the author for copyright.

Among the British authors, Jane Austen first appears in the Carey list with *Elizabeth Bennett; or, Pride and Prejudice*, in 1832. Described on its title page as "the first American edition from the third London edition," it was printed in 750 copies at a total cost of \$351.48, illustrating the low cost of publishing foreign books with no copyright payment involved. The cost of printing from a printed copy rather than manuscript was a further saving to the American publisher and made the foreign book in English a smaller financial risk. Scott, Dickens, and Bulwer-Lytton were among other British authors frequently reprinted by the firm.

The periodicals and annuals issued by the firm are taken out of the chronological listing with the books and are included in appendices where the consecutive numbers of each series are listed together.

*The Atlantic Souvenir*, launched by Carey & Lea for the year 1826, was the first gift annual to be published in the United States. Full costs are given for each issue of this highly successful annual, including payments to authors for each individual contribution. It appears that \$622.68 was paid for the literary contributions and \$808 for engravings (ten in all) out of a total cost of \$5,040.12, for the 1827 issue. For three poems, "The Song of the Birds," "On Passaic Falls," and "Burial of the Minnisink," Longfellow received \$10 "and Cooper's novels." J. K. Paulding contributed two articles, "The White Indian," and "The Little Dutch Sentinel of the Mahadoes," making a total of eighty pages, for which he received \$120. The engravings in this volume, as in the others, are of superior quality; they include three by G. B. Ellis, two of them American scenes, one of Trenton Falls, and

the other Passaic Falls. His honorarium for the three was \$195. "The Legend of the Grisons," an engraving by William Humphrys, is made from a sketch by the noted American artist, C. R. Leslie. Humphrys is recorded as being paid \$70 for the engraving, but no mention is made of any compensation for Leslie. In some of the cost statements a sum is designated as being paid for the drawings from which the engravings were made.

The figures on the cost of producing *The American Quarterly Review*, which the firm published from 1827 to 1833, are given in Appendix C. About two thousand copies of each issue were printed, at a total cost ranging from \$1,084 to \$2,773. Contributors were paid two dollars a page, and the name of each author and his honorarium is listed for each issue. The cost data for the *American Journal of the Medical and Physical Sciences* indicates that their authors were also paid at the rate of two dollars a page, and the cost of publishing an issue was substantially the same as for *The American Quarterly Review*. It is of interest to note that plates were used, and the cost of coloring them by hand is recorded. *The American Journal of the Medical Sciences* is still being published by the successor of Carey & Lea, the firm of Lea & Febiger.

The labor of editing this volume was a large task which has been ably done. It is a valuable record and a significant contribution to the history of the book trade. It will provide indispensable source material for the eventual writing of a comprehensive history of American book publishing.—*Rudolph Gjelsness, University of Michigan.*

**The Wonder and the Glory.** By Edward Alexander Parsons. New York: The Thistle Press, 1962. xvi, 383p. \$12.50. [Distributed by Southern Illinois University Press, Carbondale.]

*The Wonder and the Glory* is a curious and charming book—a biobibliography or bibliobiography of one of the great book collectors of our time and, perhaps (Robert Alonzo Brock, Charles Colcock Jones, and I. K. Tefft would doubtless nod approval to the "perhaps"), the greatest Southern collector of all time. Edward Alexander Parsons' library, "some fifty thousand prints, books, autographs, bindings, manuscripts

and historical documents," is now one of the libraries of the University of Texas. This book is the autobiography of the man who built that collection.

To say again: It is a curious book. One learns more of the basic facts of Mr. Parsons' life from the jacket copy than from the book itself. It is a rambling, random account of travels, a downpour of name-dropping (of the author's real and bibliothecal acquaintances), and a gallimaufry of interesting and trivial anecdotes of the "But thereby hangs a tale" school of writing. It is overlarded with quotations, albeit some delightful ones. Too small a proportion of the book is devoted to a description of Mr. Parsons' collection. For this we must look some day to a proper catalog from the University of Texas.

And to say again: It is a charming book. Mr. Parsons' style is graciously Bourbon, as were his concept and his manner of collecting. His bookishness is deeply ingrained and his knowledge of books exceedingly wide. His memories of a by-gone New Orleans are delightfully rose colored. And some of his anecdotes are quietly tickling, particularly his telling of his gentle rebuff at the hands—or, rather, by the tongue—of that most underrated American humorist, President Calvin Coolidge.

*The Wonder and the Glory* is a book for the bookish. The nearer one approaches Mr. Parsons' own bookishness, the more he will enjoy the book. He writes of himself:

I had no "small vices." I did not smoke, drink, gamble or follow the races or the ladies. I had no time for Clubs or social groups. . . . Whatever time was left from law and the making of money was too little indeed to satisfy the real purpose of it all: the building of a collection . . . , and the alluring study necessary to acquire an approximate knowledge of [books] and of that endless sea of learning—bibliography.

It was a great life, but it took a day of forty-eight hours to do it justice.—*Richard Harwell, Bowdoin College.*

**Vermont Imprints, 1778-1820.** Compiled by Marcus A. McCorison. Worcester, Mass.: American Antiquarian Society, 1963. 597p. \$15. (63-14992)

This is the latest in a series of highly desirable lists of early imprints from specific

geographical areas; it is also a very welcome and worthy addition to the group of fine bibliographical studies that have come out of the American Antiquarian Society.

This new volume identifies and when possible locates 2273 books, pamphlets, and broadsides issued by the printers and publishers who plied their trades in the Green Mountain State between 1778—date of the establishment of its first press in Dresden (now Hanover, N.H.) by the Spooners—and the year 1821. Bibliographical information includes author, his dates, title-page transcription, including place, publisher, and date, as well as pagination, size, locations of copies, and notes on copyrights. The work is obviously competently done.

Compiler McCorison, who is librarian of the American Antiquarian Society, has completely revised and included in the present volume the list of titles of *Vermont Imprints before 1800* prepared by Elizabeth F. Cooley in 1937. By his own count he has eliminated ninety-nine entries therefrom—seventy-four of which were newspapers and therefore covered definitively by Mr. McCorison's sometime colleague, the indefatigable Clarence S. Brigham and therefore excluded—and he has added 119 new items. Some rearranging of Cooley entries was also done because of revised authors or dates. Thus this list completely supersedes the Cooley list and is probably definitive. A sample check of McCorison's 1819 imprints, for example, against the recently-published volume of Shaw and Shoemaker's *American Bibliography* for the same year, shows some sixteen entries in the former which do not seem to appear in the latter. Some of the difference, however, might be accounted for by the different policies of inclusion used by the two works.

McCorison includes as an appendix to his list a separate contribution of considerable consequence. This is a list of the more than three hundred individuals and firms that comprised the printing trades of Vermont during the period covered by the bibliography. Brief biographical sketches and references to further information are given for each. Herein are listed such important publishers as Anthony Haswell and William Fessenden, such immigrant Scots and Irish bookmen as James Kirkaldie and John Henry, and such printers as subsequently worked



the presses of the Western Country, including Samuel Vail and Matthew Lyon, also born in Ireland. Listed as well are bookbinders, engravers, papermakers, and booksellers. This is a valuable addition to the several directories of the early book trades of particular locales, most of which have been published by the New York Public library. The biographical sketches, incidentally, make interesting reading.

Also given as appendices are a list of Vermont printers arranged by town, and a table correlating years and item numbers. As would be expected of a book of this kind, it is well indexed. As *should* be expected of a book of this kind, it is quite handsomely designed and manufactured by the Stinehour Press of Lunenburg, Vermont. We may hope that the publication of this important work will inspire similar studies of other geographical areas.—D. K.

**Centralization and Documentation.** Arthur D. Little, Inc. Cambridge, Mass.: The Author, 1963. 74p.

This is the final report of a study supported by the National Science Foundation. It considers the feasibility of centralizing facilities for the storage and retrieval of scientific documents and makes the following recommendations to the National Science Foundation:

1. Do not support large-scale centralization of document searching facilities at this time. A large centralized facility drawing upon the current state of the art of document retrieval techniques could probably not achieve the main objective for which it was designed—provision of an effective, exhaustive, literature-searching capability to supplement efforts to prevent duplicated research or development investments. Responsibility for showing that a proposed centralized facility would be feasible and would satisfy this objective must be borne by the proponents of centralization, employing quantitative evaluation techniques such as those we have developed.

2. Support the undertaking of a comprehensive program to yield additional information and insight as to what the real informational needs of scientists and engineers are. Such a survey is a necessary prerequisite to the possible support of centralized document searching facilities in the future, to insure that such facilities will serve real functions, and that they will in fact be used. To be meaningful, the

survey must be conducted with considerable imagination and insight.

3. Before undertaking extensive efforts to develop aids such as elaborate word thesauri for existing, partially centralized information retrieval systems, investigate further the use of statistical techniques both for the automatic generation of thesaurus lists and for the automation of some of the functions currently performed by human intermediaries.

4. To support such a program, test operate one of the medium-sized operating coordinate retrieval systems on a statistical associative basis. We feel that the state of the art of these associative techniques will permit such an undertaking, that a great deal could be learned from it, and that substantial benefits to the users of the system could quite possibly be realized.

5. For activities which are not concerned with exhaustive literature search operations, support centralization on an individual project basis, after cost effectiveness analyses have demonstrated—quantitatively—that adequate service levels and over-all benefits will accrue.

It is heartening to see a study by an organization that has been deeply involved in the past in installation of mechanized searching systems, as Arthur D. Little has been, that shows that they are willing to go where the facts lead. As they point out, the only "automatic" document searching system that has been applied on any substantial scale is the coordinate searching procedure and, "despite the use of high-speed digital computers, the searching logic employed in these most advanced systems is basically unchanged from that used in the earliest applications . . . the systems are based on a purely mechanical attempt to match terms." The data analyzed indicate that in such systems the indexing of all scientific literature by this approach would require using substantially all meaningful scientific words as indexing terms, and even a file of half a million or so documents would require at least ten thousand index terms.

A model is developed for study and evaluation of coordinate retrieval systems and applied to several collections. This shows that it will be difficult to obtain high precision together with high recall ratios, and that even with an IBM 7090 (a very large-scale computer) the data processing cost for a large collection could become very great.

These conclusions point up the need for (a) demonstration that cost and effectiveness

analyses should precede any further support in this field, and (b) that there is great need to develop the science upon which a sound technology may be based.—*Ralph R. Shaw, Rutgers University.*

**Serials in Australian Libraries; Social Sciences and Humanities. A Union List.** 2 vols. Canberra: National Library of Australia, 1963. Price to be determined.

The publication of these two volumes marks another step forward in the efforts of Australian libraries to compile information on their resources. This "interim edition" is designed to be a companion to *Scientific Serials in Australian Libraries*, as it might well be after it is used and continued as a list of holdings of several hundred libraries in the country. The list includes periodicals and other serials, as well as mono-

graphic and some publishers' series, but it does not contain newspapers, company reports, house organs, and certain ephemeral titles. Almost twenty thousand titles are included.

Australian librarians, through AACOBS (the Australian Advisory Council on Bibliographical Services), the National Library of Australia, and the work of personnel in individual libraries, have been pooling their efforts to gain an insight into present holdings. The objective is to develop, so far as is feasible, within programs of individual institutions a program of collecting that will be beneficial to the country as a whole. Australian libraries, because of their distance from one another, have an opportunity that is both unique and challenging, particularly in a country in which the social sciences and humanities, as well as science and technology, are regarded as important.—*Maurice F. Tauber, Columbia University.* ■■

## Books Briefly Noted

*Americans in Africa: A Preliminary Guide to American Missionary Archives and Library Manuscript Collections on Africa.* By Robert Collins and Peter Duignan. (Hoover Institution Bibliographical Series, no. 12.) Stanford, Calif.: The Hoover Institution on War, Revolution, and Peace, 1963. 96p. \$2.

*Catalogo Colectivo de Publicaciones Periodicas Existentes en Bibliotecas Cientificas y Tecnicas Argentinas.* By Ernesto Gustavo Gietz. Buenos Aires: Scientific and Technical Libraries of Argentina, 1962. 1,726p.

*The Catholic Church in America: An Historical Bibliography.* By Edward R. Vollmar. New York: Scarecrow Press. 339p. \$8.50.

*A Checklist of Serials for African Studies.* By Peter Duignan and Kenneth M. Glazier. (Hoover Institution Bibliographical Series, no. 13.) Stanford, Calif.: The Hoover Institution on War, Revolution, and Peace, 1963. 104p. \$3.

*The Chinese Communist Movement, 1937-1949: An Annotated Bibliography.* By Chun-tu Hsueh. (Hoover Institute Bibliographical Series, no. 11.) Stanford, Calif.:

The Hoover Institution on War, Revolution, and Peace, 1962. 312p. \$5.

*Correlation Index to Current Department of Defense Research Reports.* Cambridge, Mass.: M. I. T. Libraries, 1963. \$10.

*Educational Media in Libraries.* Edited by Carl H. Melinat. Syracuse, N.Y.: Syracuse University School of Library Science, 1963. 39p. \$1.50.

*General Encyclopedias in Print: A Comparative Analysis 1963, Second revised ed.* Compiled by Padraig S. Walsh. Akron, Ohio: Reference Books Research Service, 1963. 66p. \$1.50.

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*Selected Bibliography on Indexing in Science and Technology: Theory, Application and Techniques.* Edited by Philip L. Dopkowski. (Center for Technology and Administration School of Government and Public Administration, Bulletin no. 9.) Washington: American University, 1963. xiii, 101p. \$2.50.

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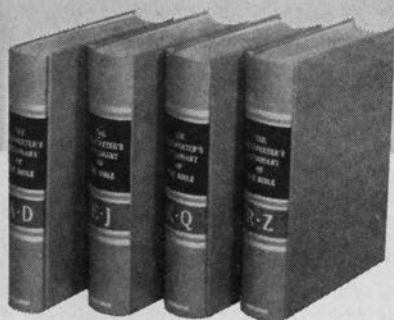
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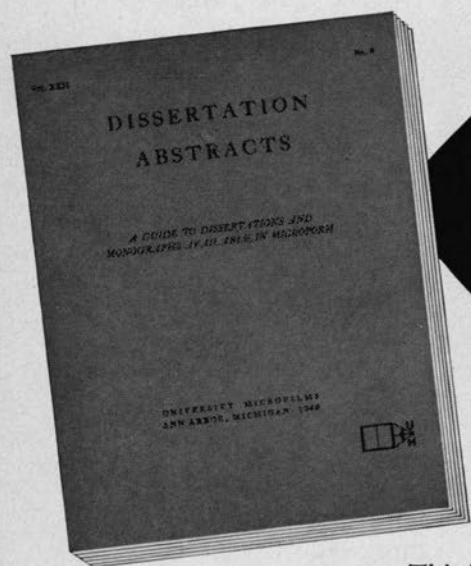
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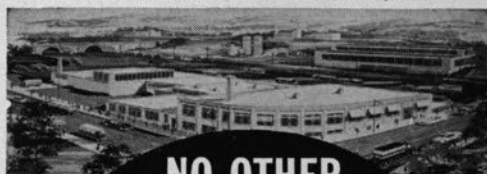
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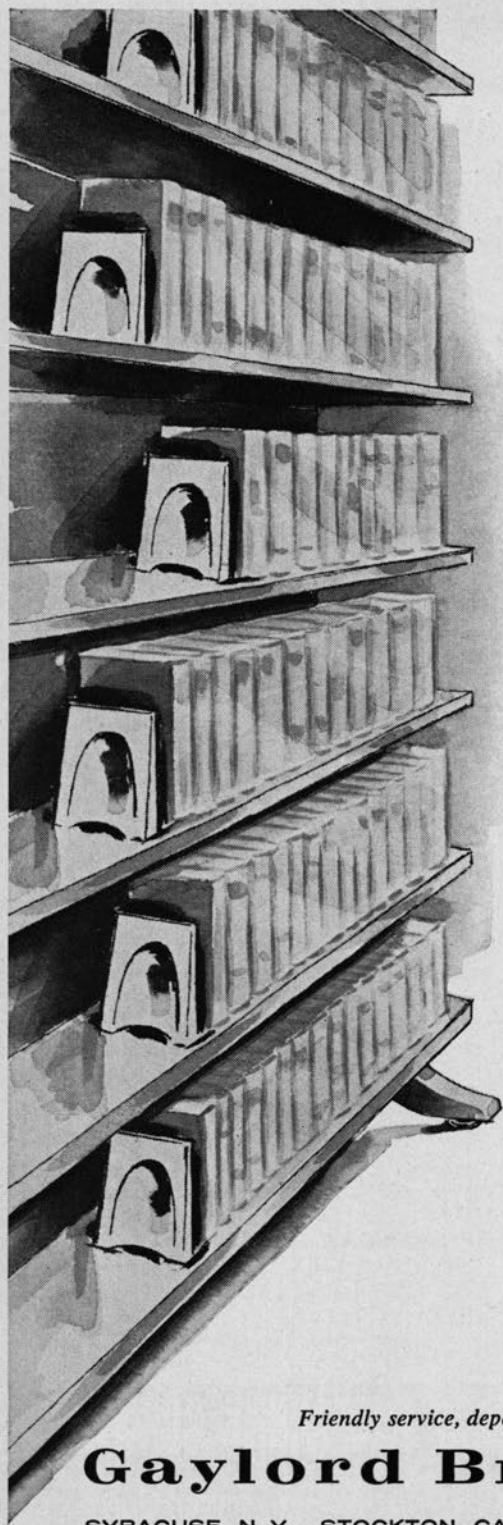
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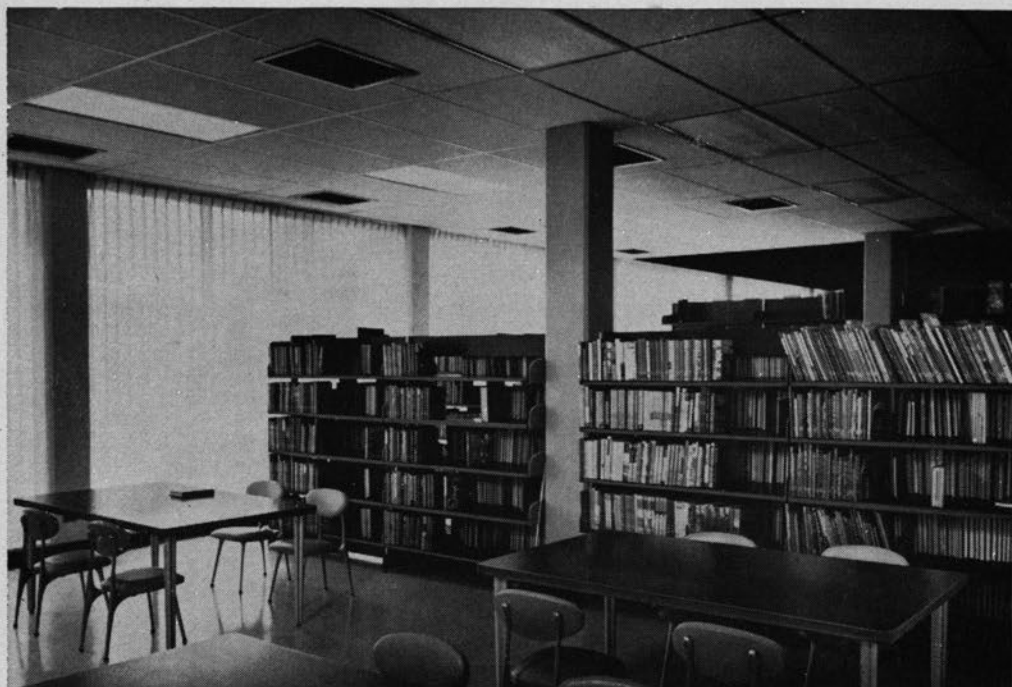
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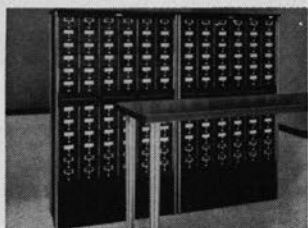


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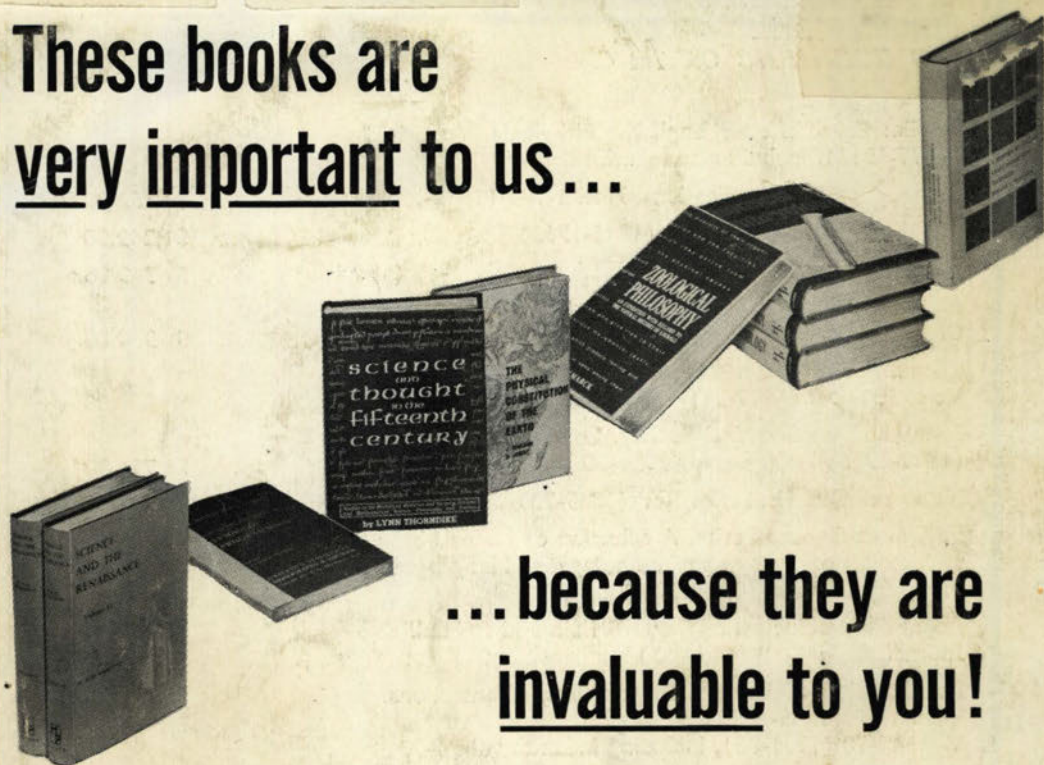


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